

1.6.2 Definitions

Base Station	An entity in the public radio telecommunications system used for radio telecommunications with mobile stations.
Base Station Controller	The control portion of the base station that includes call control logic and interconnections to the MSC, the BTSs that are part of the BS, other BSCs, and BTSs of neighboring BSs for purposes of soft/softer handoff.
Base Transceiver Station	A component of a base station that includes radio equipment. A BTS is sometimes equated with the physical cell site of a wireless network.
Bearer Connection	A connection intended to provide a path for user traffic.
Call Association	The totality of the active communication between the mobile station and the network, including all signaling and transfer of user information.
Cell	The unit of a base station having the ability to radiate in a given geographic area; a "sector" or "face" of a physical radio equipment implementation.
Downlink	The direction of MSC to BS.
Handoff	<p>Handoff is the process by which an air interface circuit between a mobile station and a base station is transferred from the current base station equipment and air interface channel to either a different base station equipment and air interface channel or a different air interface channel on the current base station. The following types of handoff are supported:</p> <ol style="list-style-type: none"> 1. Hard Handoff: A handoff that requires the mobile station to tune its radio equipment or to reestablish synchronization. 2. Soft Handoff: A handoff that does not require the mobile station to tune its radio equipment or to reestablish synchronization and that uses the same frame selection function (and voice transcoding function, if this is a voice call) in the network for both the old and new air interface channels. 3. Soft Handoff with Pre-Selection: The configuration achieved when a BS internally splits a single forward flow of coded user information from the frame selector to send it to two or more cells controlled by that BS. In the reverse direction, the BS joins the flows of coded user information frames from those cells, selects the best quality frame (preselection), and forwards only that selected frame to the frame selector. 4. Softer Handoff: A handoff involving two or more traffic channels on a call such that in the forward direction the BS splits a single flow of traffic channel frames into two or more forward flows to be sent to the mobile station with the power control combined bit set to indicate that the same reverse power control information is to be used. In the reverse direction the BS combines the traffic channel frames that are received from two or more cells/sectors and forms a single reverse flow from this combination.

1	Interworking Function	The Interworking Function (IWF), used in the context of the this
2		standard, provides a translation of the user traffic on a data call
3		between the fixed network and the air interface.
4	Logical Channel	A logical path that can carry signaling, user traffic, or a
5		combination of the two between two entities such as the network
6		and the mobile station. A logical channel can be instantiated
7		over one or more physical channels. Logical channels may also
8		share physical channels.
9	Mobile Switching Center	The MSC switches MS-originated or MS-terminated traffic. An
10		MSC is usually connected to at least one base station. It may
11		connect to other public networks PSTN, ISDN, etc., other MSCs
12		in the same network, or MSCs in different networks. (It has been
13		referred to as Mobile Telephone Switching Office, MTSO.) It
14		provides the interface for user traffic between the wireless
15		network and other public switched networks, or other MSCs.
16	Mobility Security Association	
17		A collection of security contexts, between a pair of nodes, which
18		may be applied to Mobile IP protocol messages exchanged
19		between them. Each context indicates an authentication
20		algorithm and mode, a secret (a shared key, or appropriate
21		public/private key pair), and a style of replay protection in
22		use. Network Identification The Network Identification
23		(NID) is a number that uniquely identifies a network within a
24		cellular or PCS system.
25	Packet Control Function	An entity in the radio access network that manages the relay of
26		packets between the BS and the PDSN.
27	Packet Data Session	An instance of use of packet data service by a mobile user. A
28		packet data session begins when the user invokes packet data
29		service. A packet data session ends when the user or the network
30		terminates packet data service. During a particular packet data
31		session, the user may change locations but the same IP address is
32		maintained.
33	Packet Data Serving Node	Routes MS originated or MS terminated packet data traffic. A
34		PDSN establishes, maintains and terminates link layer sessions
35		to mobile stations.
36	Packet Zone Identification	The Packet Zone Identification (PZID) is a number that uniquely
37		identifies the Packet Control Function (PCF) coverage area
38		within a particular SID/NID area. The combined SID/NID/PZID
39		triplet is unique to a PCF.
40	Physical Channel	A physical path between the SDU function and the mobile
41		station that consists of any connecting A3 traffic channel(s) and
42		radio channel(s). Depending on the radio technology in use, a
43		physical channel may be in soft handoff between the mobile
44		station and the SDU function.
45	SDU Function	The SDU function (Selection/Distribution Unit function)
46		includes the following functions:
47		<u>Traffic Handler:</u> This function exchanges traffic bits with the
48		associated vocoder or CDMA RLP function, or is directly
49		connected to the A5 interface.

1		<u>Signaling Layer 2:</u> This function performs the layer 2
2		functionality of the air interface signaling protocol and is
3		responsible for the reliable delivery of layer 3 signaling
4		messages between the base station and the mobile station.
5		<u>Multiplex Sublayer:</u> This function multiplexes and
6		demultiplexes user traffic and signaling traffic for the air
7		interface.
8		<u>Power Control:</u> This function administrates the forward and
9		reverse link power control in a CDMA system. This function
10		and the channel element provide the power control function for
11		the CDMA operation. As part of this function, it generates or
12		utilizes relevant power control information that is exchanged
13		over the air interface or with the channel element.
14		<u>Frame Selection/Distribution:</u> This function is responsible for
15		selecting the "best" incoming air interface reverse link frame
16		from the channel elements involved in the soft handoff. It also
17		distributes forward air interface frames to all channel elements
18		involved in a call.
19		<u>Backhaul Frame Handler:</u> This function demultiplexes the
20		control information and the air interface reverse frame from the
21		frame received over the backhaul network. It also multiplexes
22		the control information and the air interface frames in the
23		forward direction.
24		<u>External Frame Handler:</u> This function exchanges backhaul
25		frames with channel elements which are remote from the
26		Selector.
27		<u>Intra-BS Frame Handler:</u> This function exchanges backhaul
28		frames with channel elements involved in intra-BS soft handoff.
29		<u>Control:</u> This function provides control functions.
30	Security Parameter Index	Security Parameter Index (SPI) is an index identifying a security
31		context between a pair of nodes among the contexts available in
32		the Mobility Security Association. SPI values '0' through '255'
33		are reserved and are not used in any Mobility Security
34		Association.
35	Service Instance	An instance of a higher level communication service between the
36		mobile station user and various other endpoints.
37	Service Provider Network	A network operated by either the home service provider or the
38		visited service provider. The home service provider maintains
39		the customer business relationship with the user. The visited
40		service provider provides access services through the
41		establishment of a service agreement with the home service
42		provider.
43	Serving Network	The network that provides access services to the user.
44	Signaling Connection	A connection intended to provide a path for signaling traffic.
45	Source Base Station	The BS that is in control of the call is designated the source BS
46		and remains the source BS until it is removed from control of the
47		call.
48	System Identification	The System Identification (SID) is a number that uniquely
49		identifies a network within a cellular or PCS system.

1	Target Base Station	Any BS that supports the call other than the source BS is
2		designated as a target BS.
3	Transcoder	A device that transforms signals from one type of digital
4		representation to another.
5	Uplink	The direction of BS to MSC.

1.7.2 Interface Reference Model

The interfaces defined in this standard are described below.

- A1** The A1 interface carries signaling information between the Call Control (CC) and Mobility Management (MM) functions of the MSC and the call control component of the BS (BSC).
- A2** The A2 interface carries 64/56 kbps PCM information (voice/data) or 64 kbps Unrestricted Digital Information (UDI, for ISDN) between the Switch component of the MSC and one of the following:
 - the channel element component of the BS (in the case of an analog air interface), or
 - the Selection/Distribution Unit (SDU) function (in the case of a voice call over a digital air interface),
- A3** The A3 interface carries coded user information (voice/data) and signaling information between the SDU function and the channel element component of the BS (BTS). This is a logical description of the endpoints of the A3 interface. The physical endpoints are beyond the scope of this specification. The A3 interface is composed of two parts: signaling and user traffic. The signaling information is carried across a separate logical channel from the user traffic channel, and controls the allocation and use of channels for transporting user traffic.
- A5** The A5 interface carries a full duplex stream of bytes between the Interworking Function (IWF) and the SDU function.
- A7** The A7 interface carries signaling information between a source BS and a target BS.
- A8** The A8 interface carries user traffic between the BS and the PCF.
- A9** The A9 interface carries signaling information between the BS and the PCF.
- A10** The A10 interface carries user traffic between the PCF and the PDSN.
- A11** The A11 interface carries signaling information between the PCF and the PDSN.

This is a logical architecture that does not imply any particular physical implementation. Figure 1.7.2-1 shows the relationship among network components in support of mobile originations, mobile terminations, and direct BS-to-BS soft/softer handoff operations.

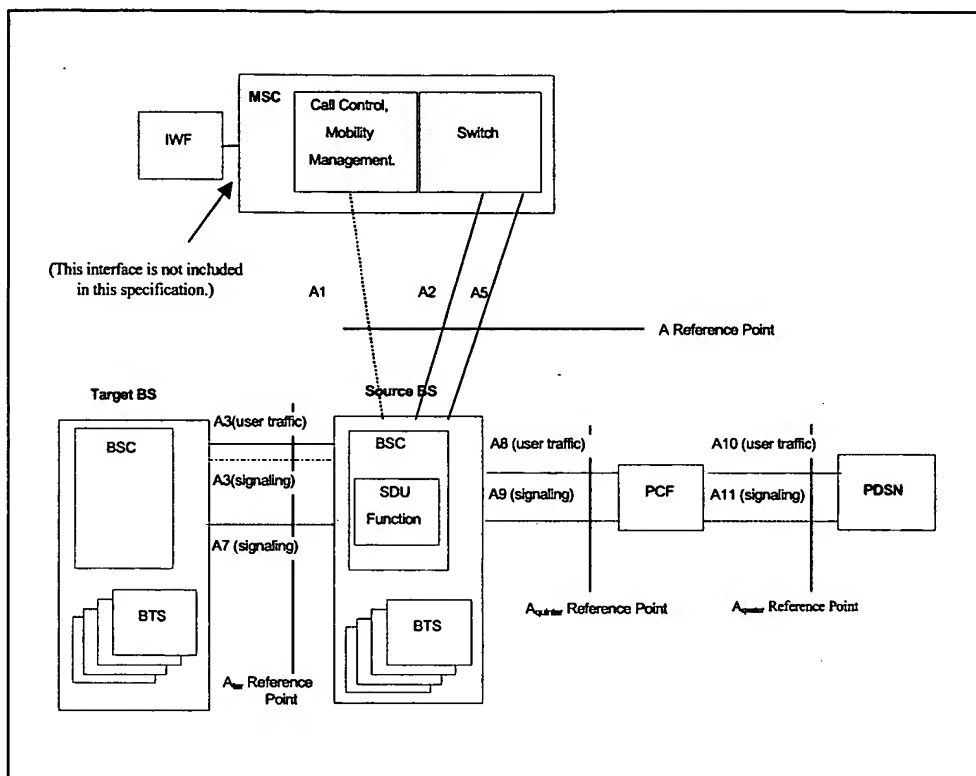


Figure 1.7.2-1- Reference Model for Digital Air Interfaces

The A3 interface is used for inter-BS soft/softer handoff when a target BS is attached to the frame selection function within the source BS.

The A5 interface is used to provide a path for user traffic for circuit-oriented data calls between the source BS and the MSC.

The A7 interface is used between the source BS and the target BS for inter-BS soft/softer handoff.

The A8 interface is used to provide a path for user traffic between source BSC and PCF for packet data services.

The A9 interface is used to provide a signaling connection between source BSC and PCF for packet data services.

The A10 interface is used to provide a path for user traffic between a PCF and a PDSN for packet data services.

The A11 interface is used to provide a signaling connection between a PCF and a PDSN for packet data services.

For this standard, the circuit-oriented data IWF is considered to be located at the MSC.

1.7.3 MSC – BS Functional Partitioning

The functions provided by the network elements on either side of the MSC-BS Interface define the functions that the MSC-BS Interface supports. Figure 1.7.3-1 below depicts a model of the MSC-BS Interface functional planes. The four functional planes embody all of the functions that the MSC-BS Interface supports.

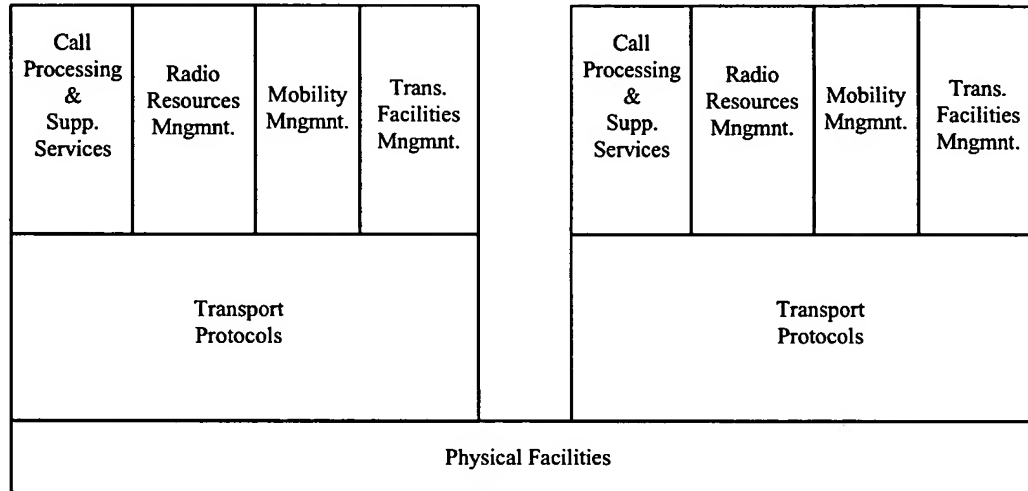


Figure 1.7.3-1 - MSC-BS Interface Functional Planes

The transmission facilities management plane is the basis for the MSC-BS Interface telecommunications services. It manages the transmission means for the communication needs of the subscribers as well as the required information transfer between the BS and MSC. The radio resource management plane manages stable links between the MSs and the MSC and supports the movement of subscribers during calls (i.e., handoff control). The mobility management plane manages subscriber databases and subscriber location data. The call processing plane manages call control and telecommunications services for the subscribers.

1.7.4 Information Flows

The interfaces defined in this standard provide:

- bearer (user traffic) connections (A2, A3(traffic), A5, A8, and A10),
- a signaling connection between the channel element component of the BS and the SDU function (A3signaling),
- a direct BS to BS signaling connection (A7),
- a signaling connection between the BS and the MSC (A1),
- a signaling connection between the BS and PCF (A9),
- a signaling connection between a PCF and PDSN pair (A11). A11 signaling messages are also used for passing accounting related and other information from the PCF to the PDSN,

In general, the functions specified on the interfaces are based on the premise that the interfaces carry signaling information that traverses the following logical paths:

- between the BS and MSC only (e.g., BS management information);
- between the MS and the MSC via the BS (e.g., the BS maps air interface messages to the MSC-BS Interface);
- between the BS and other network elements via the MSC (e.g., mobility management messages to the HLR);
- between the source BS and the target BS;
- between the BS and the PCF; and
- between the PCF and the PDSN.
- between the MS and the PDSN (e.g., Authorization information and MIP signaling).

These logical paths define all of the traffic that can exist on the defined interfaces. To support these logical paths, the interfaces of this standard can be described by the following characteristics:

- physical and electromagnetic parameters;
- channel structures; and
- message types and contents.

1.7.6 Packet Data Micro-Mobility and Macro-Mobility Concepts

The figure below provides a conceptual view of levels of packet data mobility.

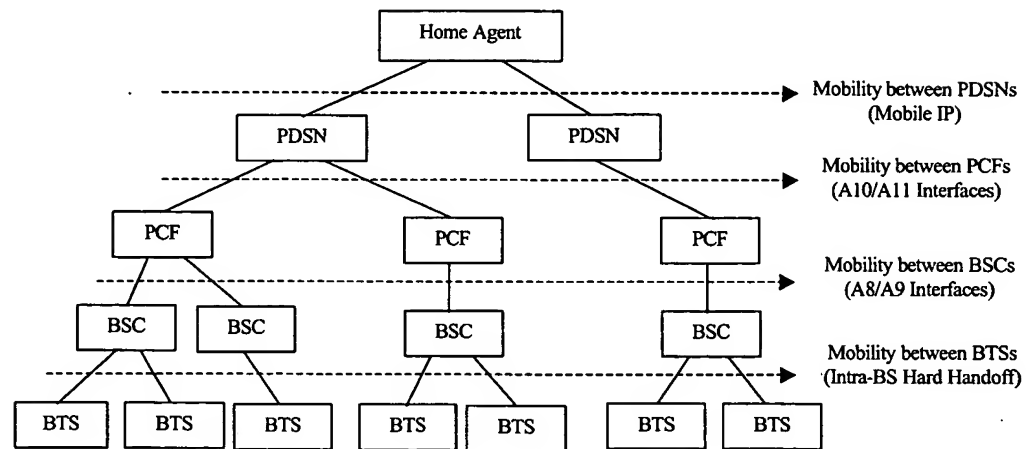


Figure 1.7.6-1 – Harmonized Architecture for Packet Data

- The A8/A9 interfaces support mobility between BSCs under the same PCF.
- The A10/A11 interfaces support mobility between PCFs under the same PDSN.
- Mobile IP supports mobility between PDSN/FA under the same Home Agent.
- Hard handoff and soft handoff procedures realize the mobility between BTSs

2.2.2.3.2 Mobile Origination, Idle Handoff with PACA Active

This section describes the call flow associated with mobile station call origination with PACA active in the system while idle handoff occurs.

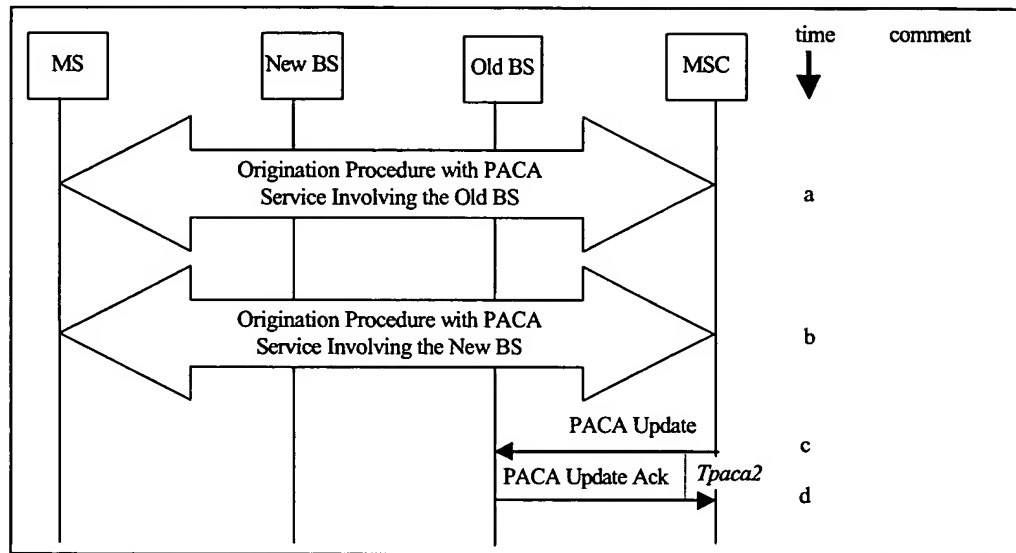


Figure 2.2.2.3.2-1 - Mobile Origination, Idle Handoff with PACA Active

- a. The MS previously attempted a call origination and the call has been queued as in steps a through f of Figure 2.2.2.3.2-1.
- b. While approaching the boundary of the cell, the MS detects an adequately strong pilot signal transmitted by one of the neighboring cells (new BS). The MS performs an idle handoff and starts monitoring the new paging channel. The MS then transmits an Origination Message, with layer 2 ack required, over the access channel of the air interface to the new BS to request service. In this case, the PACA_REORIG field received in the Origination Message is set to '1'. The normal Origination procedure (see section 2.2.2.1) will process the re-origination request.
- c. The MSC sends a PACA Update message to instruct the old BS to remove the service request from its PACA queue. The MSC can send the PACA Update message anytime after receiving the CM Service Request message from the new base station. The MSC starts timer *Tpaca2*.
- d. The BS sends a PACA Update Ack message to the MSC to confirm that appropriate action has been taken by the BS and that its PACA information has been updated. Upon receipt of the PACA Update Ack message the MSC stops timer *Tpaca2*.

2.2.2.3.3 Mobile Origination with PACA Active, Consecutive PACA Calls

This section describes the call flow associated with a successful mobile station call origination with consecutive service requests in the system. In this scenario the MS originates a call to another number while the first call request is in a PACA queue.

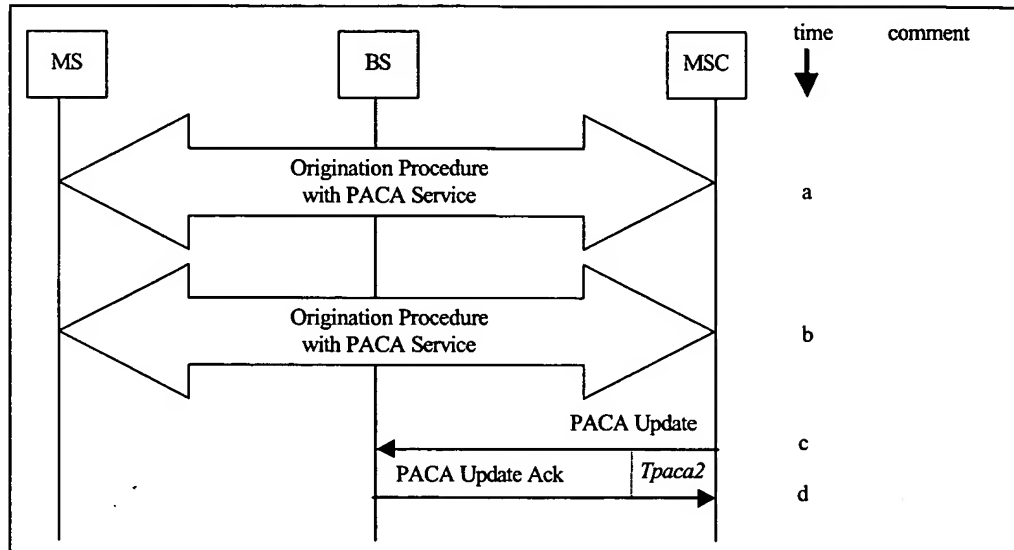


Figure 2.2.2.3.3-1 - Mobile Origination with Consecutive PACA Call Requests

- a. The MS previously attempted a call origination and the call has been queued as in steps a through f of Figure 2.2.2.3.3-1.
- b. While the first call request is pending, the MS sends an Origination Message, with layer 2 ack required, over the access channel of the air interface to the BS to request service using a different called party number. In this case, the PACA_REORIG field received in the Origination Message is set to '0'. The normal Origination procedure (see section 2.2.2.1) will process the re-origination request.
- c. The MSC sends a PACA Update message to the BS with the PACA Order indicating "Remove MS from the queue." The MSC can send the PACA Update message anytime after receiving the second CM Service Request message. The MSC starts timer *Tpaca2*.
- d. The BS sends a PACA Update Ack message to the MSC to confirm that appropriate action has been taken by the BS and that its PACA information has been updated. Upon receipt of the PACA Update Ack message the MSC stops timer *Tpaca2*.

2.2.2.3.4 PACA Call Cancellation Initiated by the MS

This section describes the call flow associated with cancellation of a PACA queued call in the system. In this scenario the cancellation is initiated by the MS.

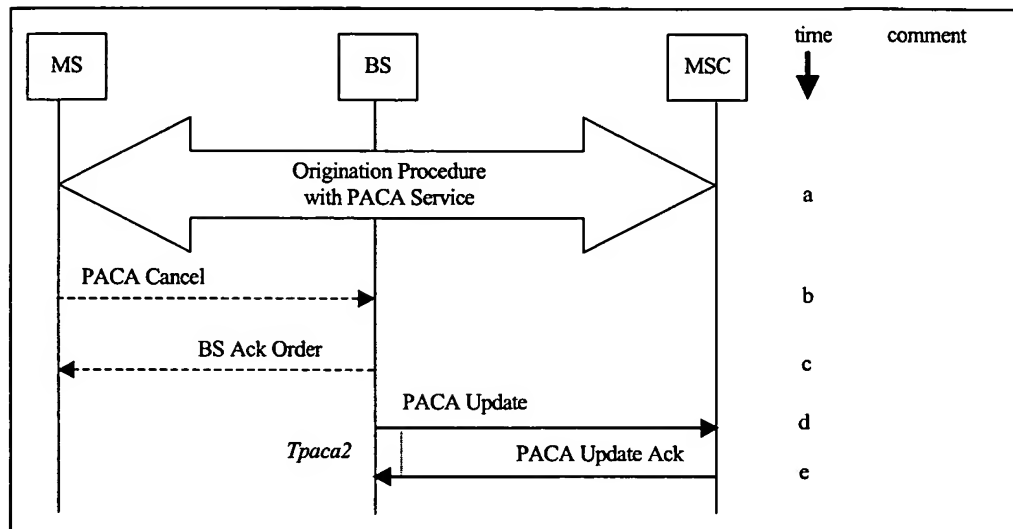


Figure 2.2.2.3.4-1 - PACA Call Cancellation Initiated by the MS

- a. The MS previously attempted a call origination and the call has been queued as in steps a through f of Figure 2.2.2.3.4-1.
- b. The MS sends a PACA Cancel Message, with layer 2 ack required, over the access channel of the air interface to the BS to request the call be canceled.
- c. The BS acknowledges the receipt of the PACA Cancel Message with a Base Station Acknowledgment Order to the MS.
- d. The BS cancels the call and removes the request from its PACA queue. The BS then sends a PACA Update message to the MSC to indicate that the call has been canceled. The BS starts timer *Tpaca2*.
- e. The MSC sends a PACA Update Ack message to the BS to confirm the receipt of the PACA Update message. Upon receipt of the PACA Update Ack message the BS stops timer *Tpaca2*.

2.2.2.3.5 PACA Call Cancellation Initiated by either MSC or BS

This section describes the call flow associated with cancellation of a PACA call in the system. In this example scenario the cancellation is initiated by the MSC. The BS-initiated PACA call cancellation is identical except the BS sends the PACA Update message to the MSC.

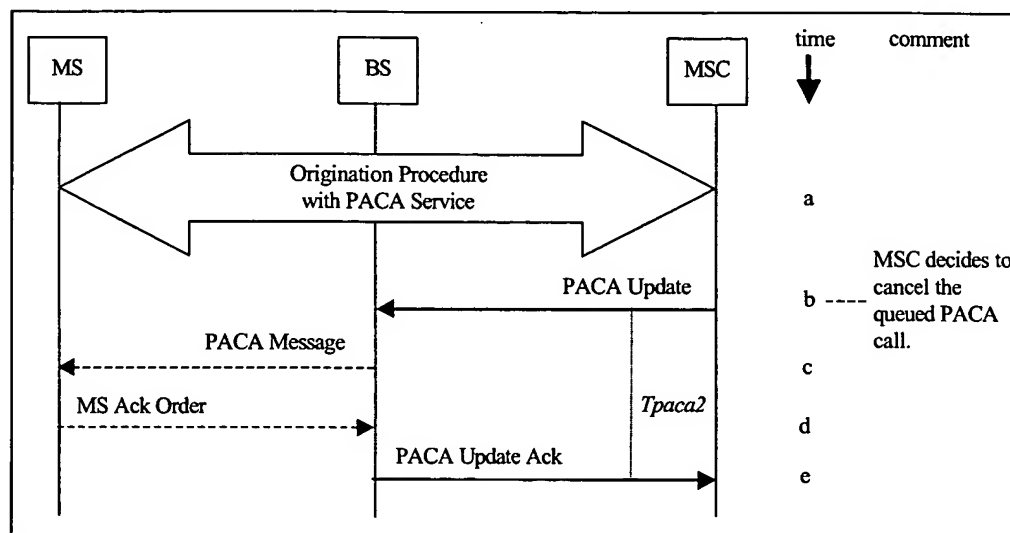


Figure 2.2.2.3.5-1 - PACA Call Cancellation Initiated by the MSC

- a. The MS previously attempted a call origination and the call has been queued as in steps a through f of Figure 2.2.2.3.5-1.
- b. The MSC sends a PACA Update message to the BS with the PACA Order indicating "Remove MS from the queue and release MS." The MSC starts timer *Tpaca2*.
- c. The BS cancels the call and removes the request from its PACA queue. The BS then sends a PACA Message (PURPOSE='0011') to the MS to indicate that the PACA call has been canceled.
- d. The MS sends an MS Ack order to the BS to acknowledge PACA cancellation.
- e. The BS sends a PACA Update Ack message to the MSC to confirm that appropriate action has been taken by the BS and that its PACA information has been updated. Upon receipt of the PACA Update Ack message the MSC stops timer *Tpaca2*.

2.2.3 Mobile Terminated Voice and Circuit Data Calls

The following subsections describe the procedure for establishing a voice or circuit data call through a mobile terminated action. Mobile terminated packet data delivery is specified in sections 2.14 and 2.15 of this document.

Mobile terminated call setup involves exchange of the following MSC-BS messages:

- Paging Request
- Complete Layer 3 Information with Paging Response
- Assignment Request
- Assignment Complete
- Assignment Failure
- Alert with Information
- Connect

2.2.3.1 Paging Request

This BSMAP message is sent from the MSC to the BS to initiate a mobile terminated call setup scenario. This message may also be sent for location purposes.

2.2.3.1.1 Successful Operation

The MSC determines that an incoming call (either land or mobile originated) terminates to a MS within its serving region and initiates the paging procedure. It starts timer T3113, sends the Paging Request message to the BS, and waits for the Complete Layer 3 information containing Paging Response message.

When the BS receives the Paging Request message from the MSC, it determines from which cell(s) to broadcast the page request. The page messages are then distributed to the appropriate cell(s), which then broadcast the page message over their paging channels. Where necessary, the page message is inserted into the computed paging channel slot.

Please refer to section 6.1.2.3, "Paging Request," for the format and content of this message.

2.2.3.1.2 Failure Operation

If a Complete Layer 3 Information message containing a Paging Response message has not been received by the MSC before timer T3113 expires, the MSC may repeat the Paging Request message and restart timer T3113.

2.2.3.2 Paging Response

This DTAP message is sent from the BS to the MSC, after receipt of a Page Response Message from the MS, in response to a Paging Request message. The Paging Response and the subsequent MSC response are used for connection establishment.

2.2.3.2.1 Successful Operation

When the MS recognizes a page message containing its identity, it will send a response message to the BS. The BS will construct the Paging Response message using the information received from the MS, append it to the Complete Layer 3 Information message (please refer to section 6.1.2.1, "Complete Layer 3 Information"), and send this combined message to the MSC. The BS will start timer T303 and await reception of the Assignment Request message. The MSC stops timer T3113 upon receiving the Paging Response message.

In the Access Probe Handoff scenario, the source BS (the BS on which the first access probe was sent), upon receiving a page response for the same mobile and the same call forwarded via an A7 connection from another BS, may choose to send a second Paging Response to the MSC. The MSC shall be able to handle a Paging Response for a mobile that is already engaged in a termination attempt by sending a Clear Command message to the BS containing a cause value of "Do not notify MS." The BS shall be able to handle Clear Command messages from the MSC for these duplicated CM Service Request messages."

The base station may select an available channel based on the mobile's capabilities, and assign the MS to that channel at any time following the receipt of a Page Response Message from the MS.

Please refer to section 6.1.2.4, "Paging Response," for the format and content of this message.

2.2.3.2.2 Failure Operation

No action is taken at the BS on failure to receive a Paging Response from the MS.

If the BS fails to receive an Assignment Request message or Clear Command message in response to the Paging Response message prior to expiration of timer T303, then it may send a Release message to the MS, and clear all associated resources.

2.2.3.2.3 Abnormal Operation

If a Paging Response is received by the MSC for a call that is no longer active, the MSC may clear the call.

2.2.3.3 UNUSED SECTION

2.2.3.4 UNUSED SECTION

2.2.3.5 UNUSED SECTION

1	2.2.3.6	Assignment Request	
2		See section 2.2.1.5.	
3	2.2.3.7	Assignment Complete	
4		See section 2.2.1.6.	
5		Note that for mobile terminated calls, the BS (MSC) considers the call stable and in the	
6		conversation state after sending (receiving) the Connect message.	
7	2.2.3.8	Assignment Failure	
8		See section 2.2.1.7.	
9	2.2.3.9	UNUSED SECTION	
10			
11	2.2.3.10	Connect	
12		This DTAP message informs the MSC that the called MS has answered (gone off-	
13		hook).	
14	2.2.3.10.1	Successful Operation	
15		When the BS receives the indication that the called MS has answered, it sends the	
16		Connect message to the MSC.	
17		Upon receiving the Connect message, the MSC connects both parties, and stops timer	
18		T301.	
19		Please refer to section 6.1.2.10, "Connect," for the format and content of this message.	
20	2.2.3.10.2	Failure Operation	
21		If the MSC fails to receive the Connect message prior to expiration of timer T301 then	
22		it performs exception handling (e.g., announcement, forwarding). The specific actions	
23		are the MSC manufacturer's concern.	
24	2.2.3.11	UNUSED SECTION	
25			

1	2.2.3.12	Alert With Information	
2			This DTAP message is sent from the MSC to the BS. Upon receipt of this message, the
3			BS shall send an Alert With Information Message on the air interface.
4	2.2.3.12.1	Successful Operation	
5			The MSC sends this message to the BS to request that the BS send an Alert With
6			Information Message on the air interface. This message may be sent by the MSC for
7			other mobile control purposes. For example, this message may be used by the MSC to
8			cause the MS to do audible alerting when it had been previously doing silent alerting
9			during a mobile termination call setup.
10			Please refer to section 6.1.2.24, "Alert With Information," for the format and content of
11			this message.
12	2.2.3.12.2	Failure Operation	
13			None.

1 **NULL.** Any value that is not in the specified range of a field.

2 **Null Traffic Channel Data.** One or more frames of a specified data sequence sent at the
3 lowest agreed-upon rate of the negotiated radio configuration. Null Traffic Channel data
4 may be sent when there is no primary, secondary, or signaling traffic available. Null Traffic
5 Channel data serves to maintain the connectivity between the mobile station and the base
6 station.

7 **Number Assignment Module (NAM).** A set of MIN/IMSI-related parameters stored in the
8 mobile station.

9 **Numeric Information.** Numeric information consists of parameters that appear as
10 numeric fields in messages exchanged by the base station and the mobile station and
11 information used to describe the operation of the mobile station.

12 **Optional Field.** A field defined within a message structure that is optionally transmitted
13 to the message recipient.

14 **Order.** A type of message that contains control codes for either the mobile station or the
15 base station.

16 **Ordered Registration.** A registration method in which the base station orders the mobile
17 station to send registration related parameters.

18 **Orthogonal Transmit Diversity (OTD).** An optional method of transmission of the
19 Forward CDMA Channel that uses two antennas, each transmitting a fraction of the code
20 symbols. It can be used to enhance performance in the presence of multipath fading radio
21 propagation.

22 **OTD.** See Orthogonal Transmit Diversity

23 **Overhead Message.** A message sent by the base station on the Paging Channel or the
24 Broadcast Control Channel to communicate base-station-specific and system-wide
25 information to mobile stations.

26 **Overload Class (OLC).** The means used to control system access by mobile stations,
27 typically in emergency or other overloaded conditions. Mobile stations are assigned one
28 (or more) of sixteen overload classes. Access to the CDMA system can then be controlled
29 on a per class basis by persistence values transmitted by the base station.

30 **PACA.** Priority Access and Channel Assignment. See PACA Call.

31 **PACA Call.** A priority mobile station originated call for which no traffic channel or voice
32 channel was immediately available, and which has been queued for a priority access
33 channel assignment.

34 **Packet.** The unit of information exchanged between the service option applications of the
35 base station and the mobile station.

36 **Padding.** A sequence of bits used to fill from the end of a message to the end of a message
37 capsule, typically to the end of the frame or half frame. All bits in the padding are '0'.

38 **Paging.** The act of seeking a mobile station when a call has been placed to that mobile
39 station.

1 If a page match is declared and the mobile station determines that it should be monitoring
 2 a neighboring base station, the mobile station may perform an access entry handoff to the
 3 neighboring base station, if all of the following conditions hold:

- 4 • The neighboring base station is listed in NGHBR_REC.
- 5 • The ACCESS_ENTRY_HO field of the NGHBR_REC corresponding to the
 6 neighboring base station is equal to '1'.
- 7 • If the mobile station performs an access entry handoff on the Access Channel, none
 8 of CONFIG_MSG_SEQ_s, SYS_PAR_MSG_SEQ_s, NGHBR_LST_MSG_SEQ_s,
 9 EXT_NGHBR_LST_MSG_SEQ_s, GEN_NGHBR_LST_MSG_SEQ_s,
 10 CHAN_LST_MSG_SEQ_s, EXT_SYS_PAR_MSG_SEQ_s, EXT_CHAN_LST_MSG_SEQ_s,
 11 USER_ZONE_ID_MSG_SEQ_s, and PRI_NGHBR_LST_MSG_SEQ_s are equal to NULL.
- 12 • If the mobile station performs an access entry handoff on the Enhanced Access
 13 Channel, none of CONFIG_MSG_SEQ_s, A41_SYS_PAR_MSG_SEQ_s,
 14 MC_RR_PAR_MSG_SEQ_s, UNI_NGHBR_LST_MSG_SEQ_s,
 15 EXT_CHAN_LST_MSG_SEQ_s, USER_ZONE_ID_MSG_SEQ_s, and
 16 PRI_NGHBR_LST_MSG_SEQ_s are equal to NULL.

17 Otherwise, the mobile station shall not perform an access entry handoff to the neighboring
 18 base station.

19 The mobile station need not perform an access entry handoff to a base station operating on
 20 another frequency.

21 If the mobile station performs an access entry handoff, it shall follow the procedures
 22 specified in 2.6.2.1.4.2 and shall perform the access entry handoff before entering the
 23 *Update Overhead Information Substate* of the *System Access State* (see 2.6.3.2).

24 If PACA is enabled, and if the mobile station performs an access entry handoff, the mobile
 25 station shall respond to the mobile-station-addressed page first and shall then re-originate
 26 the PACA call on the new base station.

27 2.6.2.4 Mobile Station Order and Message Processing Operation

28 During the *Mobile Station Order and Message Processing Operation*, the mobile station
 29 processes all messages except overhead messages (see 2.6.2.2) and page messages (see
 30 2.6.2.3).

31 The mobile station shall set CURR_ACC_MSG_SEQ to NULL.

32 The mobile station shall perform address matching as described in 2.1.2.2 of [4].

33 If Layer 3 receives a message that requires acknowledgement, the mobile station shall
 34 enter the *Update Overhead Information Substate* of the *System Access State* with an
 35 order/message response indication within T_{33m} seconds, unless otherwise specified for a
 36 particular message.

37 If Layer 3 receives a message that does not require acknowledgement, the mobile station
 38 shall transmit a response only if it is required by the message or order. If a response is
 39 required, the mobile station shall enter the *Update Overhead Information Substate* of the
 40 *System Access State* with an order/message response indication within T_{33m} seconds,

- 1 unless otherwise specified for a particular message.
- 2 If the mobile station is to enter the *Update Overhead Information Substate* of the *System*
 3 *Access State* with an order/message response indication and the mobile station
 4 determines that it should be monitoring a neighboring base station, the mobile station
 5 may perform an access entry handoff to the neighboring base station, if all of the following
 6 conditions hold:
- 7 • The neighboring base station is listed in NGHBR_REC.
 - 8 • The ACCESS_ENTRY_HO field of the NGHBR_REC corresponding to the
 9 neighboring base station is equal to '1'.
 - 10 • ACC_ENT_HO_ORDER_s is equal to '1'.
 - 11 • If the mobile station performs an access entry handoff on the Access Channel, none
 12 of CONFIG_MSG_SEQ_s, SYS_PAR_MSG_SEQ_s, NGHBR_LST_MSG_SEQ_s,
 13 EXT_NGHBR_LST_MSG_SEQ_s, GEN_NGHBR_LST_MSG_SEQ_s,
 14 CHAN_LST_MSG_SEQ_s, EXT_CHAN_LST_MSG_SEQ_s, USER_ZONE_ID_MSG_SEQ_s,
 15 PRI_NGHBR_LST_MSG_SEQ_s, and EXT_SYS_PAR_MSG_SEQ_s are equal to NULL.
 - 16 • If the mobile station performs an access entry handoff on the Enhanced Access
 17 Channel, none of CONFIG_MSG_SEQ_s, A41_SYS_PAR_MSG_SEQ_s,
 18 MC_RR_PAR_MSG_SEQ_s, UNI_NGHBR_LST_MSG_SEQ_s,
 19 EXT_CHAN_LST_MSG_SEQ_s, USER_ZONE_ID_MSG_SEQ_s, and
 20 PRI_NGHBR_LST_MSG_SEQ_s are equal to NULL.
- 21 Otherwise, the mobile station shall not perform an access entry handoff to the neighboring
 22 base station.
- 23 The mobile station need not perform an access entry handoff to a base station operating on
 24 another frequency.
- 25 If the mobile station performs an access entry handoff, it shall follow the procedures
 26 specified in 2.6.2.1.4.2 and shall perform the access entry handoff before entering the
 27 *Update Overhead Information Substate* of the *System Access State* (see 2.6.3.2). If PACA is
 28 enabled and the mobile station performs an access entry handoff, the mobile station shall
 29 respond to the order/message first and then re-originate the PACA call in the new base
 30 station.
- 31 The following directed messages and orders can be received. If any field value of the
 32 message or order is outside its permissible range, the mobile station shall send a *Mobile*
 33 *Station Reject Order* with ORDQ equal to '00000100' (message field not in valid range).
- 34 1. *Abbreviated Alert Order*: The mobile station may alert the user.
 - 35 2. *Audit Order*
 - 36 3. *Authentication Challenge Message*: The mobile station shall process the message
 37 and shall respond with an *Authentication Challenge Response Message* as specified
 38 in 2.3.12.1.4, regardless of the value of AUTH_s. The mobile station shall enter the
 39 *Update Overhead Information Substate* of the *System Access State* with an
 40 order/message response indication within T_{32m} seconds.

- 1 4. *Base Station Challenge Confirmation Order*: The mobile station shall process the
2 message and shall respond with an *SSD Update Confirmation Order* or *SSD Update*
3 *Rejection Order* as specified in 2.3.12.1.5. The mobile station shall enter the
4 *Update Overhead Information Substate* of the *System Access State* with an
5 order/message response indication within T_{32m} seconds.
- 6 5. *Channel Assignment Message*: The mobile station shall process the message as
7 follows:
- 8 • If $ASSIGN_MODE_r$ equals '001', the mobile station shall perform the following
9 actions:
 - 10 - If the message requires acknowledgement, the mobile station shall wait
11 until Layer 3 receives an indication from Layer 2 that the acknowledgement
12 to the message has been sent and acknowledged.
 - 13 - If a CDMA channel ($CDMA_FREQ$) is specified in the assignment, the mobile
14 station shall set $CDMACH_s = CDMA_FREQ_r$, tune to the new Frequency
15 Assignment, and measure the strength of each pilot listed in the assignment
16 using the Neighbor Set search procedures specified in 2.6.6.2.1 and
17 2.6.6.2.2.
 - 18 - The mobile station shall set $CONFIG_MSG_SEQ_s$ and $ACC_MSG_SEQ_s$ to
19 NULL (see 2.6.2.2) and shall set $PILOT_PN_s$ to the pilot PN sequence offset of
20 the strongest pilot in the list ($PILOT_PN_r$).
 - 21 - If the mobile station has not stored configuration parameters for the Primary
22 Paging Channel of the new base station, or if the stored information is not
23 current (see 2.6.2.2), the mobile station shall set $SYS_PAR_MSG_SEQ_s$,
24 $NGHBR_LST_MSG_SEQ_s$, $EXT_NGHBR_LST_MSG_SEQ_s$,
25 $GEN_NGHBR_LST_MSG_SEQ_s$, $CHAN_LST_MSG_SEQ_s$,
26 $EXT_CHAN_LST_MSG_SEQ_s$, $EXT_SYS_PAR_MSG_SEQ_s$,
27 $USER_ZONE_ID_MSG_SEQ_s$, $PRI_NGHBR_LST_MSG_SEQ_s$,
28 $GLOB_SERV_REDIR_MSG_SEQ_s$, and
29 $EXT_GLOB_SERV_REDIR_MSG_SEQ_s$ to NULL. The mobile station shall set
30 $PAGE_CHAN_s$ to '1' and $PAGECH_s$ to the Primary Paging Channel. The
31 mobile station shall then begin monitoring the Primary Paging Channel of
32 the selected base station.
 - 33 • If $ASSIGN_MODE_r$ equals '101' and $FREQ_INCL_r$ equals '0', the mobile station
34 shall perform the following actions:
 - 35 - If the message requires acknowledgement, the mobile station shall wait
36 until Layer 3 receives an indication from Layer 2 that the acknowledgement
37 to the message has been sent and acknowledged.
 - 38 - The mobile station shall measure the strength of each pilot listed in the
39 assignment using the Neighbor Set search procedures specified in 2.6.6.2.1
40 and 2.6.6.2.2, set $PILOT_PN_s$ to the pilot PN sequence offset of the strongest
41 pilot in the list ($PILOT_PN_r$), and set $CONFIG_MSG_SEQ_s$ and
42 $ACC_MSG_SEQ_s$ to NULL (see 2.6.2.2).

- 1 - If the mobile station has not stored configuration parameters for the Primary
2 Paging Channel of the new base station, or if the stored information is not
3 current (see 2.6.2.2), the mobile station shall set SYS_PAR_MSG_SEQ_s,
4 NGHBR_LST_MSG_SEQ_s, EXT_NGHBR_LST_MSG_SEQ_s,
5 GEN_NGHBR_LST_MSG_SEQ_s, CHAN_LST_MSG_SEQ_s,
6 EXT_CHAN_LST_MSG_SEQ_s, EXT_SYS_PAR_MSG_SEQ_s,
7 USER_ZONE_ID_MSG_SEQ_s, PRI_NGHBR_LST_MSG_SEQ_s,
8 GLOB_SERV_REDIR_MSG_SEQ_s, and
9 EXT_GLOB_SERV_REDIR_MSG_SEQ_s to NULL. The mobile station shall set
10 PAGE_CHAN_s to '1' and PAGECH_s to the Primary Paging Channel. The
11 mobile station shall then begin monitoring the Primary Paging Channel of
12 the selected base station.
- 13 • If ASSIGN_MODE_r equals '101', FREQ_INCL_r equals '1', and the band class is
14 not supported by the mobile station, the mobile station shall enter the *Update*
15 *Overhead Information Substate* of the *System Access State* with an
16 order/message response indication within T_{33m} seconds and send a *Mobile*
17 *Station Reject Order* with ORDQ field set to '00000110' (capability not supported
18 by the mobile station).
- 19 • If ASSIGN_MODE_r equals '101', FREQ_INCL_r equals '1', and the band class is
20 supported by the mobile station, the mobile station shall perform the following
21 actions:
- 22 - If the message requires acknowledgment, the mobile station shall wait until
23 Layer 3 receives an indication from Layer 2 that the acknowledgment to the
24 message has been sent and acknowledged.
- 25 - The mobile station shall set CDMACH_s = CDMA_FREQ_r and CDMABAND_s =
26 BAND_CLASS_r. Then the mobile station shall tune to the new Frequency
27 Assignment, measure the strength of each pilot listed in the assignment
28 using the Neighbor Set search procedures specified in 2.6.6.2.1 and
29 2.6.6.2.2, set PILOT_PN_s to the pilot PN sequence offset of the strongest
30 pilot in the list (PILOT_PN_r), and set CONFIG_MSG_SEQ_s and
31 ACC_MSG_SEQ_s to NULL (see 2.6.2.2).
- 32 - If the mobile station has not stored configuration parameters for the Primary
33 Paging Channel of the new base station, or if the stored information is not
34 current (see 2.6.2.2), the mobile station shall set SYS_PAR_MSG_SEQ_s,
35 NGHBR_LST_MSG_SEQ_s, EXT_NGHBR_LST_MSG_SEQ_s,
36 GEN_NGHBR_LST_MSG_SEQ_s, CHAN_LST_MSG_SEQ_s,
37 EXT_CHAN_LST_MSG_SEQ_s, EXT_SYS_PAR_MSG_SEQ_s,
38 USER_ZONE_ID_MSG_SEQ_s, PRI_NGHBR_LST_MSG_SEQ_s,
39 GLOB_SERV_REDIR_MSG_SEQ_s, and
40 EXT_GLOB_SERV_REDIR_MSG_SEQ_s to NULL. The mobile station shall set
41 PAGE_CHAN_s to '1' and PAGECH_s to the Primary Paging Channel. The
42 mobile station shall then begin monitoring the Primary Paging Channel of
43 the selected base station.

- If ASSIGN_MODE_r is not equal to '001' or '101', the mobile station shall enter the *Update Overhead Information Substate* of the *System Access State* with an order/message response indication within T_{33m} seconds and send a *Mobile Station Reject Order* with ORDQ field set to '00000010' (message not accepted in this state).

6. Data Burst Message

7. *Extended Channel Assignment Message*: The mobile station shall process the message as follows:

- If ASSIGN_MODE_r equals '001', FREQ_INCL_r equals '0', the mobile station shall perform the following actions:
 - If the message requires acknowledgement, the mobile station shall wait until Layer 3 receives an indication from Layer 2 that the acknowledgement to the message has been sent and acknowledged.
 - The mobile station shall measure the strength of each pilot listed in the assignment using the Neighbor Set search procedures specified in 2.6.6.2.1 and 2.6.6.2.2 set PILOT_PN_s to the pilot PN sequence offset of the strongest pilot in the list (PILOT_PN_r), and set CONFIG_MSG_SEQ_s and ACC_MSG_SEQ_s to NULL (see 2.6.2.2).
 - If the mobile station has not stored configuration parameters for the Primary Paging Channel of the new base station, or if the stored information is not current (see 2.6.2.2), the mobile station shall set SYS_PAR_MSG_SEQ_s, NGHBR_LST_MSG_SEQ_s, EXT_NGHRBR_LST_MSG_SEQ_s, GEN_NGHRBR_LST_MSG_SEQ_s, EXT_SYS_PAR_MSG_SEQ_s, USER_ZONE_ID_MSG_SEQ_s, PRI_NGHRBR_LST_MSG_SEQ_s, GLOB_SERV_REDIR_MSG_SEQ_s, and EXT_GLOB_SERV_REDIR_MSG_SEQ_s to NULL. The mobile station shall set PAGE_CHAN_s to '1' and PAGECH_s to the Primary Paging Channel. The mobile station shall then begin monitoring the Primary Paging Channel of the selected base station.
- If ASSIGN_MODE_r equals '001', FREQ_INCL_r equals '1', and the band class is not supported by the mobile station, the mobile station shall enter the *Update Overhead Information Substate* of the *System Access State* with an order/message response indication within T_{33m} seconds and send a *Mobile Station Reject Order* with ORDQ field set to '00000110' (capability not supported by the mobile station).
- If ASSIGN_MODE_r equals '001', FREQ_INCL_r equals '1', and the band class is supported by the mobile station, the mobile station shall perform the following actions:
 - If the message requires acknowledgement, the mobile station shall wait until Layer 3 receives an indication from Layer 2 that the acknowledgement to the message has been sent and acknowledged.

- 1 - The mobile station shall set $CDMACH_s = CDMA_FREQ_r$ and $CDMABAND_s =$
2 $BAND_CLASS_r$. The mobile station shall set $CONFIG_MSG_SEQ_s$ and
3 $ACC_MSG_SEQ_s$ to NULL (see 2.6.2.2). Then the mobile station shall tune
4 to the new Frequency Assignment, measure the strength of each pilot listed
5 in the assignment using the Neighbor Set search procedures specified in
6 2.6.6.2.1 and 2.6.6.2.2, and set $PILOT_PN_s$ to the pilot PN sequence offset of
7 the strongest pilot in the list ($PILOT_PN_r$).
 - 8 - If the mobile station has not stored configuration parameters for the Primary
9 Paging Channel of the new base station, or if the stored information is not
10 current (see 2.6.2.2), the mobile station shall set $SYS_PAR_MSG_SEQ_s$,
11 $NGHBR_LST_MSG_SEQ_s$, $EXT_NGHBR_LST_MSG_SEQ_s$,
12 $GEN_NGHBR_LST_MSG_SEQ_s$, $CHAN_LST_MSG_SEQ_s$,
13 $EXT_CHAN_LST_MSG_SEQ_s$, $EXT_SYS_PAR_MSG_SEQ_s$,
14 $USER_ZONE_ID_MSG_SEQ_s$, $PRI_NGHBR_LST_MSG_SEQ_s$,
15 $GLOB_SERV_REDIR_MSG_SEQ_s$, and
16 $EXT_GLOB_SERV_REDIR_MSG_SEQ_s$ to NULL. The mobile station shall set
17 $PAGE_CHAN_s$ to '1' and $PAGECH_s$ to the Primary Paging Channel. The
18 mobile station shall then begin monitoring the Primary Paging Channel of
19 the selected base station.
 - 20 • If $ASSIGN_MODE_r$ is not equal to '001', the mobile station shall enter the
21 *Update Overhead Information Substate* of the *System Access State* with an
22 order/message response indication within T_{33m} seconds and send a *Mobile*
23 *Station Reject Order* with $ORDQ$ field set to '00000010' (message not accepted in
24 this state).
- 25 8. *Feature Notification Message*
- 26 9. *Local Control Order*
- 27 10. *Lock Until Power-Cycled Order*: The mobile station shall record the reason for the
28 *Lock Until Power-Cycled Order* in the mobile station's semi-permanent memory
29 ($LCKRSN_P_{s-p}$ equals the least significant four bits of $ORDQ_r$). After a mobile
30 station receives this order, it shall not enter the *System Access State* (see 2.6.3)
31 until it has received an *Unlock Order* or until after power-cycling the mobile station
32 (i.e., after the next mobile station power-up). This requirement shall take
33 precedence over any other mobile station requirement specifying entry to the
34 *System Access State*. The mobile station should notify the user of the locked
35 condition. The mobile station shall exit the *Mobile Station Idle State* and enter the
36 *System Determination Substate* of the *Mobile Station Initialization State* with a lock
37 indication (see 2.6.1.1). This allows the mobile station to operate in an alternate
38 operating mode while locked.
- 39 11. *Maintenance Required Order*: The mobile station shall record the reason for the
40 *Maintenance Required Order* in the mobile station's semi-permanent memory
41 ($MAINTRSN_{s-p}$ equals the least significant four bits of $ORDQ_r$). If the mobile
42 station has previously received a *Lock Until Power-Cycled Order*, it shall remain in
43 the locked condition; otherwise the mobile station shall remain in the unlocked

condition. The mobile station should notify the user of the maintenance required condition.

12. *PACA Message*: If $P_REV_IN_USE_S$ is less than or equal to four, and if the mobile station does not support PACA capability, the mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00000110' (message requires a capability that is not supported by the mobile station); otherwise, the mobile station shall process the message as follows:

- If $PACA_S$ is equal to disabled, the mobile station shall enter the *Update Overhead Information Substate* of the *System Access State* with an order/message response indication within T_{33m} seconds and shall send a *Mobile Station Reject Order* with the ORDQ field set to '00000010' (message not accepted in this state).
- If $PACA_S$ is equal to enabled, the mobile station shall perform the following:
 - If the purpose of the message is to respond to an *Origination Message* ($PURPOSE_r$ is equal to '0000'), the mobile station shall enter the *Update Overhead Information Substate* of the *System Access State* with an order/message response indication within T_{33m} seconds and send a *Mobile Station Reject Order* with the ORDQ field set to '00000010' (message not accepted in this state).
 - If the purpose of the message is to provide the queue position of the PACA call ($PURPOSE_r$ is equal to '0001'), the mobile station shall set the PACA state timer to the duration shown in Table 3.7.2.3.2.20-2, corresponding to the value of $PACA_TIMEOUT_S$, should indicate to the user that the PACA call is still queued, and should indicate the current queue position (Q_POS_r) of the call.
 - If the purpose of the message is to instruct the mobile station to re-originate the PACA call ($PURPOSE_r$ is equal to '0010'), the mobile station shall set the PACA state timer to the duration shown in Table 3.7.2.3.2.20-2 corresponding to the value of $PACA_TIMEOUT_S$, and the mobile station shall enter the *Update Overhead Information Substate* of the *System Access State* (see 2.6.3) with a PACA response indication within T_{33m} seconds to re-originate the PACA call.
 - If the purpose of the message is to cancel the PACA call ($PURPOSE_r$ is equal to '0011'), the mobile station shall set $PACA_S$ to disabled and $PACA_CANCEL$ to '0', shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.

13. *Registration Accepted Order*:

- If $ORDQ_r = '00000101'$, the mobile station shall set $ROAM_INDI_S = ROAM_INDI_r$ and should display the roaming condition.
- If $ORDQ_r = '00000111'$, the mobile station shall perform the following

- 1 - The mobile station shall set $ROAM_INDI_s = ROAM_INDI_r$ and should display
- 2 the roaming condition.
- 3 - The mobile station shall set $SIG_ENCRYPT_MODE_s =$
- 4 $SIG_ENCRYPT_MODE_r$ and start encrypting the signaling messages sent on
- 5 r-dsch and r-csch using the encryption algorithm specified by
- 6 $SIG_ENCRYPT_MODE_r$ (see Table 3.7.4.5-1) with the key-size specified by
- 7 KEY_SIZE_r (see Table 3.7.4.5-2).
- 8 - If USE_NEW_KEY is set to '1' the mobile station shall use the session key
- 9 generated at the most recent registration for encryption of signaling and
- 10 user information. The mobile station shall store the session key in
- 11 $KEY_s[KEY_SEQ_NEW_{s-p}]$. The mobile station shall increment the variable
- 12 $KEY_SEQ_NEW_{s-p}$ by one (modulo 16).
- 13 - If USE_NEW_KEY is set to '0' then the mobile station shall use
- 14 $KEY[KEY_SEQ_r]$ as the session key.
- 15 14. *Registration Rejected Order*: This order indicates that normal service is not
- 16 available on this system. The mobile station shall disable the full-TMSI timer. If
- 17 the received order specifies to delete the TMSI ($ORDQ = '00000100'$), the mobile
- 18 station shall set all the bits of the $TMSI_CODE_{s-p}$ to '1'. The mobile station shall
- 19 enter the *System Determination Substate* of the *Mobile Station Initialization State*
- 20 with a registration rejected indication (see 2.6.1.1).
- 21 15. *Registration Request Order*: The mobile station shall process the message and
- 22 perform registration procedures as specified in 2.6.5.5.2.3.
- 23 16. *Security Mode Command Message*: The mobile station shall process the message
- 24 as follows:
- 25 • The mobile station shall set $SIG_ENCRYPT_MODE_s$ to $SIG_ENCRYPT_MODE_r$.
- 26 • If USE_NEW_KEY is set to '1' the mobile station shall use the session key
- 27 generated at the most recent registration for encryption of signaling and user
- 28 information. The mobile station shall store the session key in
- 29 $KEY_s[KEY_SEQ_NEW_{s-p}]$. The mobile station shall then increment the variable
- 30 $KEY_SEQ_NEW_{s-p}$ by one (modulo 16).
- 31 • If USE_NEW_KEY is set to '0' then the mobile station shall use $KEY[KEY_SEQ_r]$
- 32 as the session key.
- 33 17. *Service Redirection Message*: The mobile station shall process the message as
- 34 follows:
- 35 • If the mobile station is directed to an unsupported operation mode or band
- 36 class, the mobile station shall respond with a *Mobile Station Reject Order* with
- 37 $ORDQ$ equal to '00000110' (message requires a capability that is not supported
- 38 by the mobile station).
- 39 • If $DELETE_TMSI_r$ is equal to '1', the mobile station shall set all the bits of
- 40 $TMSI_CODE_{s-p}$ to '1'. The mobile station shall disable the full-TMSI timer.

- The mobile station shall set $\text{RETURN_IF_FAIL}_S = \text{RETURN_IF_FAIL}_R$.
- If RECORD_TYPE_R is equal to '00000000', the mobile station shall enter the *System Determination Substate* of the *Mobile Station Initialization State* with an NDSS off indication (see 2.6.1.1); otherwise, the mobile station shall store the redirection record received in the message as REDIRECT_REC_S and shall enter the *System Determination Substate* of the *Mobile Station Initialization State* with a redirection indication (see 2.6.1.1).

18. *Retry Order*: The mobile station shall process the message as follows:

- If RETRY_TYPE_R is equal to '000', the mobile station shall set $\text{RETRY_DELAY}_S[\text{RETRY_TYPE}]$ to 0, where RETRY_TYPE is equal to '001', '010', or '011'.
- If RETRY_TYPE_R is equal to '001', the mobile station shall perform the following:
 - If RETRY_DELAY_R is equal to '00000000', then the mobile station shall set $\text{RETRY_DELAY}_S[\text{RETRY_TYPE}_R]$ to 0.
 - If RETRY_DELAY_R is not equal to '00000000', the mobile station shall set $\text{RETRY_DELAY}_S[\text{RETRY_TYPE}_R]$ as follows:
 - + If the most significant bit of the RETRY_DELAY_R is '0', set $\text{RETRY_DELAY_UNIT}_S$ to 1000ms. If the most significant bit of the RETRY_DELAY_R is '1', set $\text{RETRY_DELAY_UNIT}_S$ to 60000ms.
 - + The mobile station shall set $\text{RETRY_DELAY_VALUE}_S$ to the seven least significant bits of RETRY_DELAY_R .
 - + The mobile station shall store the next system time 80 ms boundary + $\text{RETRY_DELAY_VALUE}_S \times \text{RETRY_DELAY_UNIT}_S$ ms as $\text{RETRY_DELAY}_S[\text{RETRY_TYPE}_R]$.

19. *Slotted Mode Order*: After receiving this order, the mobile station shall set SLOTTED_S to YES. The mobile station shall disable the TMS_Slotted timer.

20. *SSD Update Message*: The mobile station shall process the message and shall respond with a *Base Station Challenge Order* as specified in 2.3.12.1.5. The mobile station shall enter the *Update Overhead Information Substate* of the *System Access State* with an order/message response indication within T_{32m} seconds.

21. *Status Request Message*: The mobile station shall process the message. If P_REV_IN_USE_S is less than or equal to three, the mobile station shall respond with a *Status Response Message*. If P_REV_IN_USE_S is greater than three, the mobile station shall respond with an *Extended Status Response Message*. The mobile station shall enter the *Update Overhead Information Substate* of the *System Access State* with an order/message response indication within T_{33m} seconds. If the message does not specify any qualification information (QUAL_INFO_TYPE_R is equal to '00000000'), the mobile station shall include the requested information records in the response. If the message specifies a band class (QUAL_INFO_TYPE_R is equal to '00000001'), the mobile station shall only include the requested information records for the specified band class (BAND_CLASS_R) in the response.

If the message specifies a band class and an operating mode (QUAL_INFO_TYPE_r is equal to '00000010'), the mobile station shall only include the requested information records for the specified band class (BAND_CLASS_r) and operating mode (OP_MODE_r) in the response. If the message specifies a band class or a band class and an operating mode which is not supported by the mobile station, the mobile station shall send a *Mobile Station Reject Order* with ORDQ set to '00000110' (message requires a capability that is not supported by the mobile station). If the response to this message exceeds the allowable length, the mobile station shall send a *Mobile Station Reject Order* with ORDQ set to '00001000' (response message would exceed the allowable length). If the message specifies an information record which is not supported by the mobile station for the specified band class and operating mode, the mobile station shall send a *Mobile Station Reject Order* with ORDQ set to '00001001' (information record is not supported for the specified band class and operating mode).

22. *TMSI Assignment Message*: The mobile station shall store the TMSI zone and code as follows:

- The mobile station shall store the length of the TMSI zone field by setting ASSIGNING_TMSI_ZONE_LEN_{s-p} to TMSI_ZONE_LEN_r.
- The mobile station shall store the assigning TMSI zone number by setting the ASSIGNING_TMSI_ZONE_LEN_{s-p} least significant octets of ASSIGNING_TMSI_ZONE_{s-p} to TMSI_ZONE_r, and
- The mobile station shall store the TMSI code by setting TMSI_CODE_{s-p} to TMSI_CODE_r.

The mobile station shall set the TMSI expiration time by setting TMSI_EXP_TIME_{s-p} to TMSI_EXP_TIME_r. The mobile station shall disable the full-TMSI timer. The mobile station shall then respond with a *TMSI Assignment Completion Message* within T_{56m} seconds.

23. *Unlock Order*: After receiving this order, the mobile station is no longer locked. The mobile station should notify the user that the locked condition has been removed. The mobile station shall enter the *System Determination Substate of the Mobile Station Initialization State* with an *unlock indication* (see 2.6.1.1).

24. *User Zone Reject Message*

The mobile station shall ignore all other messages and orders.

2.6.2.5 Mobile Station Origination Operation

The *Mobile Station Origination Operation* is performed when the mobile station is directed by the user to initiate a call, or if the *Mobile Station Idle State* is entered with NDSS_ORIG_s enabled.

If the mobile station is directed by the user to initiate a call, the mobile station shall perform the following:

- 1 • If PACA_S is equal to enabled, the mobile station shall set PACA_S to disabled and
2 PACA_CANCEL to '0', shall disable the PACA state timer, and should indicate to the
3 user that the PACA call has been canceled.

- 4 • The mobile station shall set CURR_ACC_MSG_SEQ to NULL.

5 The mobile station shall enter the *Update Overhead Information Substate* of the *System*
6 *Access State* (see 2.6.3) with an origination indication within T_{33m} seconds.

7 2.6.2.6 Mobile Station Message Transmission Operation

8 Support of this operation is optional. If the mobile station supports the *Mobile Station*
9 *Message Transmission Operation*, the operation is performed when the user directs the
10 mobile station to transmit a *Data Burst Message*, or when the mobile station detects a
11 change in hook status and the mobile station supports the *Device Information Message* on
12 the r-csch.

13 If the mobile station supports this operation, the mobile station shall set
14 CURR_ACC_MSG_SEQ to NULL.

15 If the mobile station supports this operation and the operation is performed when the user
16 directs the mobile station to transmit a *Data Burst Message*, the mobile station shall enter
17 the *Update Overhead Information Substate* of the *System Access State* (see 2.6.3.2) with a
18 message transmission indication within T_{33m} seconds.

19 If the mobile station supports this operation and the operation is performed when the
20 mobile station detects a change in hook status the mobile station shall enter the *Update*
21 *Overhead Information Substate* of the *System Access State* (see 2.6.3.2) with a hook status
22 indication within T_{33m} seconds.

23 2.6.2.7 Mobile Station Power-Down Operation

24 The *Mobile Station Power-Down Operation* is performed when the user directs the mobile
25 station to power down.

26 The mobile station shall update stored parameters and perform other registration
27 procedures as specified in 2.6.5.5.2.4.

28 If no power-down registration is performed (see 2.6.5.5.2.4), the mobile station may power
29 down.

30 2.6.2.8 Mobile Station PACA Cancel Operation

31 The *Mobile Station PACA Cancel Operation* is performed when the user directs the mobile
32 station to cancel a PACA call.

33 If PACA_S is equal to enabled, the mobile station shall perform the following:

- 34 • The mobile station shall set PACA_S to disabled.
- 35 • The mobile station shall set PACA_CANCEL to '0', if PACA_CANCEL is equal to '1'.
- 36 • The mobile station shall disable the PACA state timer.

- 1 • The mobile station should indicate to the user that the PACA call has been
- 2 canceled.
- 3 • The mobile station shall set CURR_ACC_MSG_SEQ to NULL.
- 4 • The mobile station shall enter the *Update Overhead Information Substate* of the
- 5 *System Access State* (see 2.6.3) with a PACA cancel indication within T33m
- 6 seconds.

7 2.6.3 System Access State

8 In this state, the mobile station sends messages to the base station on the r-csch and
9 receives messages from the base station on the f-csch.

10 As illustrated in Figure 2.6.3-1, the *System Access State* consists of the following
11 substates:

- 12 • *Update Overhead Information Substate* - In this substate, if the mobile station
- 13 supports the Broadcast Control Channel for Spreading Rate 1 or Spreading Rate 3
- 14 and if the protocol revision level in use is greater than six, the mobile station will
- 15 monitor the Broadcast Control Channel until it has received a current set of
- 16 overhead messages; otherwise, the mobile station will monitor the Paging Channel
- 17 until it has a current set of overhead messages.
- 18 • *Mobile Station Origination Attempt Substate* - In this substate, the mobile station
- 19 sends an *Origination Message* to the base station.
- 20 • *Page Response Substate* - In this substate, the mobile station sends a *Page*
- 21 *Response Message* to the base station.
- 22 • *Mobile Station Order/Message Response Substate* - In this substate, the mobile
- 23 station sends a response to a message received from the base station.
- 24 • *Registration Access Substate* - In this substate, the mobile station sends a
- 25 *Registration Message* to the base station.
- 26 • *Mobile Station Message Transmission Substate* - In this substate, the mobile station
- 27 sends a *Data Burst Message* or a *Device Information Message* to the base station.
- 28 • *PACA Cancel Substate* - In this substate, the mobile station sends a *PACA Cancel*
- 29 *Message* to the base station.

30

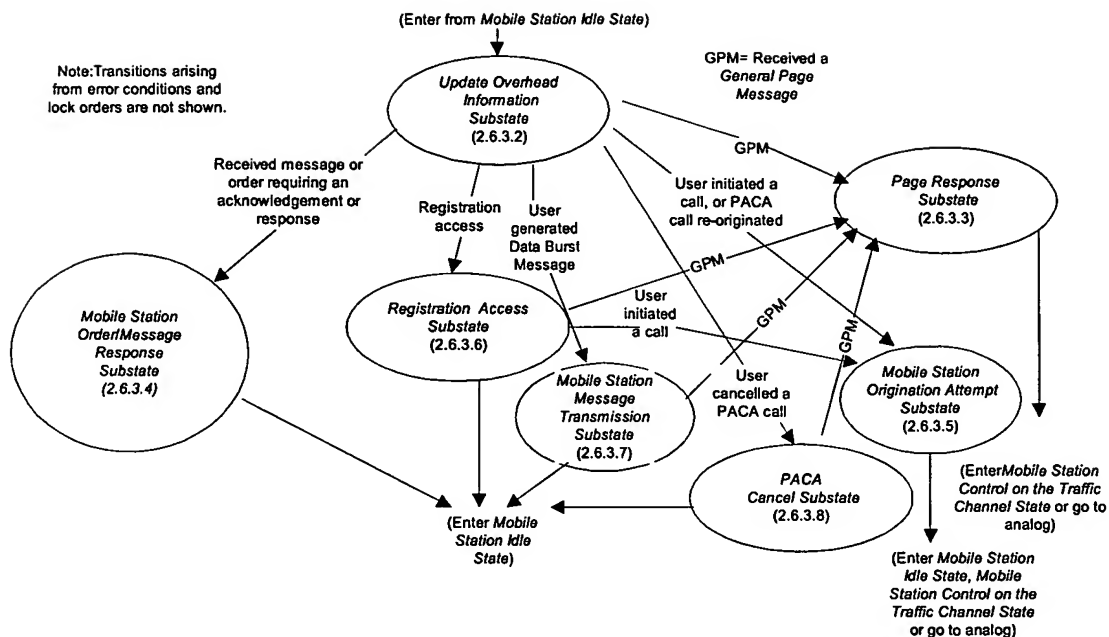


Figure 2.6.3-1. System Access State

2.6.3.1 Access Procedures

2.6.3.1.1 Access Attempts

If the mobile station monitors the Paging Channel, the mobile station transmits on the Access Channel using a random access procedure. Many parameters of the random access procedure are supplied by the base station in the *Access Parameters Message*. The random access procedure is described in [4] and [3].

If the mobile station monitors the Forward Common Control Channel/Broadcast Control Channel, the mobile station transmits on the Enhanced Access Channel using a random access procedure. Many parameters of the random access procedure are supplied by the base station in the *Enhanced Access Parameters Message*.

2.6.3.1.2 Reserved

2.6.3.1.3 Handoffs

While in the *System Access State*, the mobile station shall continue its pilot search (see 2.6.3.1.3.1), and may perform access handoffs (see 2.6.3.1.3.2) and/or access probe handoffs (see 2.6.3.1.3.3).

If the mobile station performs access handoffs and/or access probe handoffs, the mobile station shall maintain the following variables:

- CURRENT_ACTIVE_PILOT_s
- PREVIOUS_ACTIVE_PILOT_s

1 • FIRST_ACTIVE_PILOT_s

2 Upon entering the *System Access State* the mobile station shall set
3 CURRENT_ACTIVE_PILOT_s, PREVIOUS_ACTIVE_PILOT_s and FIRST_ACTIVE_PILOT_s to
4 NULL. Prior to starting an access attempt, the mobile station shall set
5 CURRENT_ACTIVE_PILOT_s and PREVIOUS_ACTIVE_PILOT_s to NULL. When the mobile
6 station selects a base station for transmission of an access probe, the mobile station shall
7 proceed as follows:

- 8 • If CURRENT_ACTIVE_PILOT_s is not the same as the pilot of the selected base
9 station, the mobile station shall set PREVIOUS_ACTIVE_PILOT_s to the value of
10 CURRENT_ACTIVE_PILOT_s.
- 11 • The mobile station shall set CURRENT_ACTIVE_PILOT_s to the identity of the pilot
12 corresponding to the selected base station.
- 13 • If FIRST_ACTIVE_PILOT_s is NULL, the mobile station shall set
14 FIRST_ACTIVE_PILOT_s to the value of CURRENT_ACTIVE_PILOT_s.

15 Before the mobile station transmits an access probe to a new base station on the Access
16 Channel, the mobile station shall update parameters based on the *System Parameters*
17 *Message*, the *Access Parameters Message* and the *Extended System Parameters Message*
18 on the associated new Paging Channel and process parameters from the messages (see
19 2.6.2.2.1, 2.6.2.2.2, and 2.6.2.2.5).

20 Before the mobile station transmits an access probe to a new base station on the
21 Enhanced Access Channel, the mobile station shall update parameters based on the *ANSI-*
22 *41 System Parameters Message*, the *Enhanced Access Parameters Message*, and the *MC-*
23 *RR System Parameters Message* on the associated new Broadcast Control Channel and
24 process parameters from the messages (see 2.6.2.2.13, 2.6.2.2.14, and 2.6.2.2.15).

25 If the mobile station monitors the Paging Channel, the mobile station shall update
26 parameters based on the *Neighbor List Message*, the *Extended Neighbor List Message*, or
27 the *General Neighbor List Message* on the associated new Paging Channel and process
28 parameters from the message (see 2.6.2.2.3, 2.6.2.2.7, and 2.6.2.2.8).

29 If the mobile station monitors the Forward Common Control Channel/Broadcast Control
30 Channel, the mobile station shall update parameters based on the *Universal Neighbor List*
31 *Message* on the associated new Broadcast Control Channel and process parameters from
32 the message (see 2.6.2.2.17).

33 If the mobile station receives the *User Zone Identification Message* or the *Private Neighbor*
34 *List Message*, the mobile station shall update parameters based on these messages on the
35 associated new Paging Channel or Broadcast Control Channel and process parameters
36 from the messages (see 2.6.2.2.9 and 2.6.2.2.10). If the mobile station receives a *Global*
37 *Service Redirection Message* (see 2.6.2.2.6) which directs the mobile station away from the
38 new base station, the mobile station shall not access the new base station. If the mobile
39 station receives an *Extended Global Service Redirection Message* (see 2.6.2.2.11) which
40 directs the mobile station away from the new base station, the mobile station shall not
41 access the new base station. The mobile station shall process these messages only once
42 after each access handoff.

2.6.3.1.3.1 Pilot Search

The following sets of pilot offsets are defined for a mobile station in the *System Access State*. Each pilot offset is a member of only one set.

- Active Set: The pilot offset of the Forward CDMA Channel whose Paging Channel or Forward Common Control Channel/Broadcast Control Channel is being monitored.
- Neighbor Set: The pilots that are not currently in the Active Set and are likely candidates for access handoff or access probe handoff. The members of the Neighbor Set are specified in the *Neighbor List Message*, the *Extended Neighbor List Message*, and the *General Neighbor List Message on the Paging Channel*. The members of the Neighbor Set are specified in the *Universal Neighbor List Message* on the Broadcast Control Channel.
- Remaining Set: The set of all possible pilot offsets in the current system (integer multiples of PILOT_INC_s) on the current CDMA Frequency Assignment, excluding the pilots in the Neighbor Set and the Active Set.

2.6.3.1.3.2 Access Handoff

The mobile station is permitted to perform an access handoff to use the Paging Channel with the best pilot strength and an associated Access Channel. The mobile station is permitted to perform an access handoff to use the Forward Common Control Channel with the best pilot strength and an associated Enhanced Access Channel. The mobile station is permitted to perform an access handoff when waiting for a response from the base station or before sending a response to the base station. An access handoff is permitted after an access attempt while the mobile station is in the *Page Response Substate* or the *Mobile Station Origination Attempt Substate*.

When the mobile station declares a loss of the Paging Channel or the Forward Common Control Channel while waiting for a response from the base station in the *Page Response Substate* or in the *Mobile Station Origination Attempt Substate*, the mobile station shall perform an access handoff, if all of the following conditions hold:

- The pilot corresponding to the new base station is in the list ACCESS_HO_LIST ,
- ACCESS_HO_s is equal to '1', and
- The mobile station is not already in the process of performing an access attempt.

When the mobile station declares a loss of the Paging Channel or the Forward Common Control Channel, after receiving a message but before responding to that message while in the *Page Response Substate* or in the *Mobile Station Origination Attempt Substate*, the mobile station shall perform an access handoff if the following conditions hold:

- The pilot corresponding to the new base station is in the list ACCESS_HO_LIST ,
- ACCESS_HO_s is equal to '1',
- $\text{ACCESS_HO_MSG_RSP}_s$ is equal to '1', and
- The mobile station is not already in the process of performing an access attempt.

1 When the mobile station declares an insufficiency of the Paging Channel³ or the Forward
 2 Common Control Channel, while waiting for a response from the base station in the *Page*
 3 *Response Substate* or in the *Mobile Station Origination Attempt Substate*, the mobile station
 4 may perform an access handoff if all of the following conditions hold:

- 5 • The pilot corresponding to the new base station is in the list ACCESS_HO_LIST,
- 6 • ACCESS_HO_S is equal to '1', and
- 7 • The mobile station is not already in the process of performing an access attempt.

8 When the mobile station declares an insufficiency of the Paging Channel⁴ or the Forward
 9 Common Control Channel, after receiving a message but before responding to that
 10 message while in the *Page Response Substate* or in the *Mobile Station Origination Attempt*
 11 *Substate*, the mobile station may perform an access handoff if all of the following
 12 conditions hold:

- 13 • The pilot corresponding to the new base station is in the list ACCESS_HO_LIST,
- 14 • ACCESS_HO_S is equal to '1',
- 15 • ACCESS_HO_MSG_RSP_S is equal to '1', and
- 16 • The mobile station is not already in the process of performing an access attempt.

17 If ACCESS_PROBE_HO_S is equal to '0' and ACCESS_HO_S is equal to '1', and the mobile
 18 station declares a loss of the Paging Channel or the Forward Common Control Channel
 19 during an access attempt, after sending at least one complete access probe, the mobile
 20 station may monitor other Paging Channels or the Forward Common Control Channels
 21 which are in ACCESS_HO_LIST for T_{42m} seconds after the loss of the Paging Channel or
 22 the Forward Common Control Channel on which the access attempt was made⁵.

23 2.6.3.1.3.3 Access Probe Handoff

24 The mobile station is permitted to perform an access probe handoff when the mobile
 25 station is in the *Page Response Substate* or the *Mobile Station Origination Attempt*
 26 *Substate*.

27 The mobile station may perform an access probe handoff during an access attempt to a
 28 pilot in ACCESS_HO_LIST when the message being sent is the *Origination Message* or the
 29 *Page Response Message*, if all of the following conditions hold:

- 30 • ACCESS_PROBE_HO_S is equal to '1',

³ Insufficiency of the Paging Channel and the Forward Common Control Channel is implementor-defined.

⁴ Insufficiency of the Paging Channel and the Forward Common Control Channel is implementor-defined.

⁵ The mobile station would be waiting for a response to the message transmitted in the access probe.

The mobile station shall set the TMSI expiration time by setting TMSI_EXP_TIME_{s-p} to TMSI_EXP_TIME_r. The mobile station shall disable the full-TMSI timer. The mobile station shall then respond with a *TMSI Assignment Completion Message* within T_{56m} seconds.

16. User Zone Reject Message

17. Any other message: If the mobile station receives any other message specified in Table 3.7.2.3-1, it shall ignore all Layer 3 fields. The mobile station shall ignore all other messages.

2.6.3.5 Mobile Station Origination Attempt Substate

In this substate, the mobile station sends an *Origination Message*. If the base station responds to the *Origination Message* with an authentication request, the mobile station responds in this substate.

If a message received from the base station requires a Layer 2 acknowledgment and does not require a Layer 3 response, Layer 3 shall indicate to Layer 2 that no response is outstanding (see 2.1.1.2.2.1 of [4]).

If a message received from the base station requires a Layer 2 acknowledgment and also a Layer 3 response, Layer 3 shall indicate to Layer 2 that a response is outstanding (see 2.1.1.2.2.1 of [4]).

When transmitting a response to a message received from the base station, Layer 3 shall indicate to Layer 2 that the type of the message is a response (see 2.1.1.2.2.1 of [4]).

When transmitting an autonomous message (i.e., a message that is not sent as a response to a message received from the base station), Layer 3 shall indicate to Layer 2 that the type of the message is a request other than a registration request or a message transmission request (see 2.1.1.2.2.1 of [4]).

Upon entering the *Mobile Station Origination Attempt Substate*, the mobile station shall set RL_{GAIN_ADJ_s} to '0000' and perform the following:

- If the substate was entered with an origination indication, the mobile station shall send the *Origination Message* as an r-csch request.
- If the substate was entered with a PACA response indication, the mobile station shall send the *Origination Message* as an r-csch response using the access procedures specified in 2.6.3.1.1.2. The mobile station shall include the dialed digits from the previous origination attempt in the *Origination Message*.
- If the origination is a result of NDSS_ORIG_s being equal to enabled, the mobile station shall include in the *Origination Message* the dialed digits recorded from the previous origination attempt.
- If the mobile station has a stored service configuration (that is, both the Service Configuration information record and the Non-negotiable Service Configuration information record) and USE_SYNC_ID_s is equal to '1', the mobile station may include the SYNC_ID field in the *Origination Message* and, if included, shall set it to the 16-bit CRC computed over the entire stored service configuration as specified in 2.6.11.

- 1 • The mobile station shall include in the *Origination Message* as many of the dialed
2 digits as possible without exceeding the message capsule size. When calculating
3 the number of dialed digits to be included in the *Origination Message*, the mobile
4 station shall assume the following if P_REV_IN_USE_s is greater than three:
 - 5 – The number of additional reported pilots (NUM_ADD_PILOTS) is equal to five
6 (see 2.6.3.1.7 and 2.7.1.3.1.3) so that up to five additional pilots may be
7 reported in any access probe, and
 - 8 – The number of alternative service option numbers (NUM_ALT_SO) is less than
9 or equal to the maximum alternative service option numbers
10 (MAX_NUM_ALT_SO_s).
- 11 • If PACA_s is equal to enabled, the mobile station shall set the PACA_REORIG field of
12 the *Origination Message* to '1'; otherwise, the mobile station shall set the field to '0'.

13 While in this substate, the mobile station shall monitor the Paging Channel or the Forward
14 Common Control Channel. The mobile station may perform an access probe handoff or an
15 access handoff as described in 2.6.3.1.3.2 and 2.6.3.1.3.3. If the mobile station declares a
16 loss of the Paging Channel or the Forward Common Control Channel (see 2.6.2.1.1.4)
17 during an access attempt, the mobile station may perform an access probe handoff;
18 otherwise, it shall declare an access attempt failure and shall perform the following:

- 19 • If the mobile station is monitoring the Paging Channel, the mobile station shall set
20 SYS_PAR_MSG_SEQ_s and ACC_MSG_SEQ_s to NULL.
- 21 • If the mobile station is monitoring the Forward Common Control Channel, the
22 mobile station shall set MC_RR_PAR_MSG_SEQ_s and ACC_MSG_SEQ_s to NULL.
- 23 • If PACA_s is equal to enabled, the mobile station shall set PACA_s to disabled and
24 PACA_CANCEL to '0', shall disable the PACA state timer, and should indicate to the
25 user that the PACA call has been canceled.
- 26 • If NDSS_ORIG_s is equal to enabled, the mobile station shall set NDSS_ORIG_s to
27 disabled, and should indicate to the user that the call origination is canceled.
- 28 • The mobile station shall update its registration variables as specified in 2.6.5.5.3.2.
- 29 • The mobile station shall disable its transmitter and enter the *Mobile Station Idle*.
30 *State*.

31 If the mobile station receives confirmation of delivery of any message sent by the mobile
32 station in this substate, the mobile station shall perform an access handoff if all of the
33 following conditions hold:

- 34 • The mobile station declares a loss of the Paging Channel or the Forward Common
35 Control Channel,
- 36 • The mobile station is permitted to perform an access handoff (see 2.6.3.1.3.2) and
37 there are pilots other than the active pilot in the access handoff list (see
38 2.6.3.1.3.2).

1 If the mobile station declares a loss of the Paging Channel or the Forward Common Control
 2 Channel and does not perform an access handoff, the mobile station shall perform the
 3 following:

- 4 • If the mobile station is monitoring the Paging Channel, the mobile station shall set
 5 SYS_PAR_MSG_SEQ_S and ACC_MSG_SEQ_S to NULL.
- 6 • If the mobile station is monitoring the Forward Common Control Channel, the
 7 mobile station shall set MC_RR_PAR_MSG_SEQ_S and ACC_MSG_SEQ_S to NULL.
- 8 • If PACA_S is equal to enabled, the mobile station shall set PACA_S to disabled and
 9 PACA_CANCEL to '0', shall disable the PACA state timer, and should indicate to the
 10 user that the PACA call has been canceled.
- 11 • If NDSS_ORIG_S is equal to enabled, the mobile station shall set NDSS_ORIG_S to
 12 disabled and should indicate to the user that the call origination is canceled.
- 13 • The mobile station shall disable its transmitter and enter the *Mobile Station Idle*
 14 *State*.

15 If the mobile station receives confirmation of delivery of the *Origination Message*, the
 16 mobile station shall update its registration variables with respect to the base station to
 17 which the first access probe was transmitted after entering the *System Access State* as
 18 specified in 2.6.5.5.3.1.

19 The mobile station shall set and disable the *System Access State* timer as follows:

- 20 • The mobile station shall disable the timer whenever it begins an access attempt.
- 21 • The mobile station shall set the timer to T_{42m} seconds whenever it ends an access
 22 attempt.
- 23 • The mobile station shall disable the timer whenever it exits the *System Access*
 24 *State*.

25 If the *System Access State* timer expires while in this substate, the mobile station shall
 26 perform the following:

- 27 • If PACA_S is equal to enabled, the mobile station shall set PACA_S to disabled and
 28 PACA_CANCEL to '0', shall disable the PACA state timer, and should indicate to the
 29 user that the PACA call has been canceled.
- 30 • If NDSS_ORIG_S is equal to enabled, the mobile station shall set NDSS_ORIG_S to
 31 disabled, and should indicate to the user that the call origination is canceled.
- 32 • If the mobile station is monitoring the Paging Channel, the mobile station shall set
 33 SYS_PAR_MSG_SEQ_S and ACC_MSG_SEQ_S to NULL and enter the *Mobile Station*
 34 *Idle State*.
- 35 • If the mobile station is monitoring the Forward Common Control Channel, the
 36 mobile station shall set MC_RR_PAR_MSG_SEQ_S and ACC_MSG_SEQ_S to NULL and
 37 enter the *Mobile Station Idle State*.

38 If the mobile station is directed by the user to disconnect the call, the mobile station shall
 39 perform the following actions:

- 1 • Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any
- 2 access attempt in progress.
- 3 • The mobile station shall send the *Release Order* (normal release) in assured mode
- 4 requiring confirmation of delivery.
- 5 • After receiving confirmation of delivery of the *Release Order*, the mobile station
- 6 shall enter the *System Determination Substate* of the *Mobile Station Initialization*
- 7 *State* with a release indication (see 2.6.1.1).

8 If the mobile station is directed by the user to power off, the mobile station shall perform
9 the following actions:

- 10 • Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any
- 11 access attempt in progress.
- 12 • The mobile station shall send the *Release Order* (with power-down indication) in
- 13 assured mode requiring confirmation of delivery.
- 14 • After receiving confirmation of delivery of the *Release Order*, the mobile station
- 15 shall perform power-down registration procedures (see 2.6.5.1.2).
- 16 • The mobile station may power off.

17 If the mobile station receives a *Channel Assignment Message* or the *Extended Channel*
18 *Assignment Message*, Layer 3 shall send a *dedicated channel assignment* indication to
19 Layer 2 (see 2.1.2.1.2 of [4]). If the mobile station has not received confirmation of delivery
20 of the *Origination Message* before receiving the *Channel Assignment Message* or the
21 *Extended Channel Assignment Message*, the mobile station shall update its registration
22 variables with respect to the base station to which the first access probe was transmitted
23 after entering the *System Access State*, as specified in 2.6.5.5.3.1.

24 If the mobile station is to exit the *System Access State* as a result of processing Layer 3
25 fields of a message requiring an acknowledgment, the mobile station shall exit the *System*
26 *Access State* after Layer 3 receives an indication from Layer 2 that the acknowledgment to
27 the message has been sent and acknowledged.

28 If Layer 3 receives a message other than a *Channel Assignment Message* or an *Extended*
29 *Channel Assignment Message* with an indication from Layer 2 that an access attempt for a
30 message being transmitted was not terminated as a result of processing the Layer 2 fields
31 of the received message, the mobile station shall ignore the received message.

32 The following directed messages and orders can be received. If any field value of the
33 message or order is outside its permissible range, the mobile station may send a *Mobile*
34 *Station Reject Order* with ORDQ equal to '00000100' (message field not in valid range).

- 35 1. *Authentication Challenge Message*: The mobile station shall respond to the message
- 36 as specified in 2.3.12.1.4, regardless of the value of AUTH_S.
- 37 2. *Base Station Challenge Confirmation Order*: The mobile station shall respond to the
- 38 message as specified in 2.3.12.1.5.
- 39 3. *Channel Assignment Message*: The mobile station shall process the message as
- 40 follows:

- 1 • If ASSIGN_MODE_r equals '000', the mobile station shall perform the following
2 actions:
 - 3 – The mobile station shall set CH_IND_s to '01'.
 - 4 – The mobile station shall store the frame offset (FRAME_OFFSET_s =
5 FRAME_OFFSET_r), the message encryption mode indicator
6 (ENCRYPT_MODE_s = ENCRYPT_MODE_r), and, if FREQ_INCL_r equals '1', the
7 Frequency Assignment (CDMACH_s = CDMA_FREQ_r).
 - 8 – If PACA_s is equal to enabled, the mobile station shall set PACA_s to disabled
9 and PACA_CANCEL to '0', shall disable the PACA state timer, and should
10 indicate to the user that the PACA call is proceeding.
 - 11 – The mobile station shall initialize the CODE_CHAN_LIST as described in
12 2.6.8, shall set SERV_NEG_s to disabled, and shall enter the *Traffic Channel*
13 *Initialization Substate* of the *Mobile Station Control on the Traffic Channel*
14 *State*.
- 15 • If ASSIGN_MODE_r equals '001', the mobile station shall perform the following
16 actions:
 - 17 – If the message requires acknowledgement, the mobile station shall wait
18 until Layer 3 receives an indication from Layer 2 that the acknowledgement
19 to the message has been sent and acknowledged.
 - 20 – If a CDMA channel (CDMA_FREQ) is specified in the assignment, the mobile
21 station shall set CDMACH_s = CDMA_FREQ_r, tune to the new Frequency
22 Assignment, and measure the strength of each pilot listed in the assignment
23 using the Neighbor Set search procedures specified in 2.6.6.2.1 and
24 2.6.6.2.2.
 - 25 – The mobile station shall set CONFIG_MSG_SEQ_s and ACC_MSG_SEQ_s to
26 NULL (see 2.6.2.2) and shall set PILOT_PN_s to the pilot PN sequence offset of
27 the strongest pilot in the list.
 - 28 – If the mobile station has not stored configuration parameters for the Primary
29 Paging Channel of the new base station, or if the stored information is not
30 current (see 2.6.2.2), the mobile station shall set SYS_PAR_MSG_SEQ_s,
31 NGHBR_LST_MSG_SEQ_s, EXT_NGHBR_LST_MSG_SEQ_s,
32 GEN_NGHBR_LST_MSG_SEQ_s, CHAN_LST_MSG_SEQ_s,
33 EXT_CHAN_LST_MSG_SEQ_s, EXT_SYS_PAR_MSG_SEQ_s,
34 USER_ZONE_ID_MSG_SEQ_s, PRI_NGHBR_LIST_MSG_SEQ_s,
35 GLOB_SERV_REDIR_MSG_SEQ_s, and
36 EXT_GLOB_SERV_REDIR_MSG_SEQ_s to NULL.

- 1 – If the mobile station has not stored configuration parameters for the Primary
2 Forward Common Control Channel of the new base station, or if the stored
3 information is not current (see 2.6.2.2), the mobile station shall set
4 EXT_NGHRBR_LST_MSG_SEQ_s, GEN_NGHRBR_LST_MSG_SEQ_s,
5 EXT_CHAN_LST_MSG_SEQ_s, EXT_SYS_PAR_MSG_SEQ_s,
6 USER_ZONE_ID_MSG_SEQ_s, PRI_NGHRBR_LIST_MSG_SEQ_s,
7 GLOB_SERV_REDIR_MSG_SEQ_s, A41_SYS_PAR_MSG_SEQ_s,
8 MC_RR_PAR_MSG_SEQ_s, UNIV_NGHRBR_LIST_MSG_SEQ_s and
9 EXT_GLOB_SERV_REDIR_MSG_SEQ_s to NULL.
- 10 – The mobile station shall set PAGE_CHAN_s to '1' and PAGECH_s to the
11 Primary Paging Channel. The mobile station shall then begin monitoring
12 the Primary Paging Channel of the selected base station.
- 13 – The mobile station shall set FCCCH_CHAN_s to '1' and FCCCH_ID_s to the
14 Primary Forward Common Control Channel. The mobile station shall then
15 begin monitoring the Primary Forward Common Control Channel of the
16 selected base station.
- 17 – If RESPOND_r is equal to '1', the mobile station shall enter the *Update*
18 *Overhead Information Substate* with an origination indication.
- 19 • If ASSIGN_MODE_r equals '010', the mobile station shall perform the following
20 actions:
 - 21 – If the mobile station does not support analog operation in the requested
22 band class, the mobile station shall send a *Mobile Station Reject Order* with
23 the ORDQ field set to '00000110' (capability not supported by the mobile
24 station) and the mobile station shall remain in the *Mobile Station Origination*
25 *Attempt Substate*.
 - 26 – If the mobile station supports analog operation in the requested band class
27 and RESPOND_r equals '1', the mobile station shall perform the following
28 actions:
 - 29 + If USE_ANALOG_SYS_r equals '0', the mobile station shall perform the
30 following actions:
 - 31 o If PACA_s is equal to enabled, the mobile station shall set PACA_s to
32 disabled and PACA_CANCEL to '0', shall disable the PACA state
33 timer, and should indicate to the user that the PACA call has been
34 canceled.
 - 35 o The mobile station shall enter the analog Initialization Task with an
36 origination indication (see 2.6.1).
 - 37 + If USE_ANALOG_SYS_r equals '1', the mobile station shall perform the
38 following actions:
 - 39 o The mobile station shall set SERVSYS_s to SYS_A if ANALOG_SYS_r is
40 equal to '0', or shall set SERVSYS_s to SYS_B if ANALOG_SYS_r is
41 equal to '1'.

- o If $PACA_S$ is equal to enabled, the mobile station shall set $PACA_S$ to disabled and $PACA_CANCEL$ to '0', shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.
 - o The mobile station shall then enter the analog Initialization Task with an origination indication (see 2.6.1).
- If $ASSIGN_MODE_r$ equals '011', the mobile station shall perform the following actions:
 - If the mobile station does not support analog operation in the requested band class, the mobile station shall send a *Mobile Station Reject Order* with the $ORDQ$ field set to '00000110' (capability not supported by the mobile station) and the mobile station shall remain in the *Mobile Station Origination Attempt Substate*.
 - If the mobile station supports analog operation in the requested band class:
 - + If the analog channel type is '00', the mobile station shall perform the following actions:
 - o The mobile station shall store the system identification ($SID_S = SID_r$), the voice mobile station attenuation code ($VMAC_S = VMAC_r$), the voice channel number ($ANALOG_CHAN_S = ANALOG_CHAN_r$), the SAT color code ($SCC_S = SCC_r$), and the message encryption mode indicator ($MEM_S = MEM_r$).
 - o The mobile station shall set DTX_S to '00'.
 - o If $PACA_S$ is equal to enabled, the mobile station shall set $PACA_S$ to disabled and $PACA_CANCEL$ to '0', shall disable the PACA state timer, and should indicate to the user that the PACA call is proceeding.
 - o The mobile station shall enter the Confirm Initial Voice Channel Task (see 2.6.4.2) with an origination indication.
 - + If the analog channel type is not '00', the mobile station shall perform the following actions:
 - o If the mobile supports narrow analog mode, the mobile station shall perform the following actions:
 - ◊ The mobile station shall store the system identification ($SID_S = SID_r$), the voice mobile station attenuation code ($VMAC_S = VMAC_r$), the voice channel number ($ANALOG_CHAN_S = ANALOG_CHAN_r$), the message encryption mode indicator ($MEM_S = MEM_r$), the analog channel type ($AN_CHAN_TYPE_S = AN_CHAN_TYPE_r$) and the digital SAT code ($DSCC_S = DSCC_MSB_r \times 4 + SCC_r$).
 - ◊ The mobile station shall set DTX_S to '00'.

- 1 ◊ If PACA_S is equal to enabled, the mobile station shall set PACA_S
- 2 to disabled, shall disable the PACA state timer, and should
- 3 indicate to the user that the PACA call is proceeding.
- 4 ◊ The mobile station shall enter the Confirm Initial Narrow Analog
- 5 Voice Channel Task (see 2.6.5.2A of [22]) with an origination
- 6 indication.
- 7 o If the mobile station does not support narrow analog mode, the
- 8 mobile station shall send a *Mobile Station Reject Order* with the
- 9 ORDQ field set to '00000110' (capability not supported by the mobile
- 10 station) and the mobile station shall remain in the *Mobile Station*
- 11 *Origination Attempt Substate* of the *System Access State*.
- 12 • If ASSIGN_MODE_r equals '100', the mobile station shall perform the following
- 13 actions:
- 14 – The mobile station shall set CH_IND_S to '01'.
- 15 – If GRANTED_MODE_r equals '00', and the multiplex option or radio
- 16 configuration specified in the DEFAULT_CONFIG field is not supported by
- 17 the mobile station, the mobile station shall send a *Mobile Station Reject*
- 18 *Order* with ORDQ field set to '00000110' (capability not supported by the
- 19 mobile station) and remain in *Mobile Station Origination Attempt Substate*.
- 20 – If FREQ_INCL_r equals '0', the mobile station shall perform the following
- 21 actions:
- 22 + The mobile station shall store the frame offset (FRAME_OFFSET_S =
- 23 FRAME_OFFSET_r), the message encryption mode indicator
- 24 (ENCRYPT_MODE_S = ENCRYPT_MODE_r), the granted mode
- 25 (GRANTED_MODE_S = GRANTED_MODE_r), and the default configuration
- 26 (DEFAULT_CONFIG_S = DEFAULT_CONFIG_r).
- 27 + The mobile station shall set SERV_NEG_S to enabled.
- 28 + If PACA_S is equal to enabled, the mobile station shall set PACA_S equal to
- 29 disabled and PACA_CANCEL to '0', shall disable the PACA state timer,
- 30 and should indicate to the user that the PACA call is proceeding.
- 31 + The mobile station shall initialize CODE_CHAN_LIST as described in
- 32 2.6.8.
- 33 + The mobile station shall then enter the *Traffic Channel Initialization*
- 34 *Substate* of the *Mobile Station Control on the Traffic Channel State*.
- 35 – If FREQ_INCL_r equals '1', the mobile station shall perform the following
- 36 actions:
- 37 + If the band class is not supported by the mobile station, the mobile
- 38 station shall send a *Mobile Station Reject Order* with ORDQ field set to
- 39 '00000110' (capability not supported by the mobile station) and remain
- 40 in the *Mobile Station Origination Attempt Substate*.

- 1 + If the band class is supported by the mobile station, the mobile station
- 2 shall perform the following actions:
- 3 o The mobile station shall store the frame offset ($FRAME_OFFSET_S =$
- 4 $FRAME_OFFSET_r$), the message encryption mode indicator
- 5 ($ENCRYPT_MODE_S = ENCRYPT_MODE_r$), the granted mode
- 6 ($GRANTED_MODE_S = GRANTED_MODE_r$), the default configuration
- 7 ($DEFAULT_CONFIG_S = DEFAULT_CONFIG_r$), the band class
- 8 ($CDMABAND_S = BAND_CLASS_r$), and the Frequency Assignment
- 9 ($CDMACH_S = CDMA_FREQ_r$).
- 10 o The mobile station shall set $SERV_NEG_S$ to enabled.
- 11 o If $PACA_S$ is equal to enabled, the mobile station shall set $PACA_S$ to
- 12 disabled and $PACA_CANCEL$ to '0', shall disable the PACA state
- 13 timer, and should indicate to the user that the PACA call is
- 14 proceeding.
- 15 o The mobile station shall initialize the $CODE_CHAN_LIST$ as
- 16 described in 2.6.8.
- 17 o The mobile station shall then tune to the new Frequency Assignment
- 18 and enter the *Traffic Channel Initialization Substate of the Mobile*
- 19 *Station Control on the Traffic Channel State*.
- 20 • If $ASSIGN_MODE_r$ equals '101', the mobile station shall perform the following
- 21 actions:
- 22 – If $FREQ_INCL_r$ equals '0', the mobile station shall perform the following
- 23 actions:
- 24 + If the message requires acknowledgement, the mobile station shall wait
- 25 until Layer 3 receives an indication from Layer 2 that the
- 26 acknowledgement to the message has been sent and acknowledged.
- 27 + The mobile station shall set $CONFIG_MSG_SEQ_S$ and $ACC_MSG_SEQ_S$
- 28 to NULL (see 2.6.2.2) and shall set $PILOT_PN_S$ to the pilot PN sequence
- 29 offset of the strongest pilot in the list ($PILOT_PN_r$).
- 30 + If the mobile station has not stored configuration parameters for the
- 31 Primary Paging Channel of the new base station, or if the stored
- 32 information is not current (see 2.6.2.2), the mobile station shall set
- 33 $SYS_PAR_MSG_SEQ_S$, $NGHBR_LST_MSG_SEQ_S$,
- 34 $EXT_NGHBR_LST_MSG_SEQ_S$, $GEN_NGHBR_LST_MSG_SEQ_S$,
- 35 $CHAN_LST_MSG_SEQ_S$, $EXT_CHAN_LST_MSG_SEQ_S$,
- 36 $EXT_SYS_PAR_MSG_SEQ_S$, $USER_ZONE_ID_MSG_SEQ_S$,
- 37 $PRI_NGHBR_LST_MSG_SEQ_S$, $GLOB_SERV_REDIR_MSG_SEQ_S$, and
- 38 $EXT_GLOB_SERV_REDIR_MSG_SEQ_S$ to NULL.

- 1 + If the mobile station has not stored configuration parameters for the
2 Primary Paging Channel of the new base station, or if the stored
3 information is not current (see 2.6.2.2), the mobile station shall set
4 EXT_NGHRBR_LST_MSG_SEQ_s, GEN_NGHRBR_LST_MSG_SEQ_s,
5 EXT_CHAN_LST_MSG_SEQ_s, EXT_SYS_PAR_MSG_SEQ_s,
6 USER_ZONE_ID_MSG_SEQ_s, PRI_NGHRBR_LST_MSG_SEQ_s,
7 GLOB_SERV_REDIR_MSG_SEQ_s, A41_SYS_PAR_MSG_SEQ_s,
8 MC_RR_PAR_MSG_SEQ_s, UNIV_NGBHR_LST_MSG_SEQ_s, and
9 EXT_GLOB_SERV_REDIR_MSG_SEQ_s to NULL.
- 10 + The mobile station shall set PAGE_CHAN_s to '1' and PAGECH_s to the
11 Primary Paging Channel. The mobile station shall then begin
12 monitoring the Primary Paging Channel of the selected base station.
- 13 + The mobile station shall set FCCCH_CHAN_s to '1' and FCCCH_ID_s to the
14 Primary Forward Common Control Channel. The mobile station shall
15 then begin monitoring the Primary Forward Common Control Channel of
16 the selected base station.
- 17 + If RESPOND_r is equal to '1', the mobile station shall perform the
18 following:
 - 19 o If the *Channel Assignment Message* does not require an
20 acknowledgment, the mobile station shall enter the *Update Overhead*
21 *Information Substate* with a page response retransmission indication
22 within T_{34m} seconds after receiving the *Channel Assignment*
23 *Message*.
 - 24 o If the *Channel Assignment Message* requires an acknowledgment,
25 the mobile station shall enter the *Update Overhead Information*
26 *Substate* with a page response retransmission indication within
27 T_{34m} seconds after Layer 3 receives an indication from Layer 2 that
28 the acknowledgement to the *Channel Assignment Message* has been
29 sent and acknowledged.
- 30 – If FREQ_INCL_r equals '1', the mobile station shall perform the following
31 actions:
 - 32 + If the band class is not supported by the mobile station, the mobile
33 station shall send a *Mobile Station Reject Order* with ORDQ field set to
34 '00000110' (capability not supported by the mobile station) and remain
35 in the *Mobile Station Origination Attempt Substate*.
 - 36 + If the band class is supported by the mobile station, the mobile station
37 shall perform the following actions:
 - 38 o If the message requires acknowledgement, the mobile station shall
39 wait until Layer 3 receives an indication from Layer 2 that the
40 acknowledgement to the message has been sent and acknowledged.

- 1 o The mobile station shall set CONFIG_MSG_SEQ_s and
2 ACC_MSG_SEQ_s to NULL (see 2.6.2.2) and shall set PILOT_PN_s to
3 the pilot PN sequence offset of the strongest pilot in the list
4 (PILOT_PN_r).
- 5 o If the mobile station has not stored configuration parameters for the
6 Primary Paging Channel of the new base station, or if the stored
7 information is not current (see 2.6.2.2), the mobile station shall set
8 SYS_PAR_MSG_SEQ_s, NGHBR_LST_MSG_SEQ_s,
9 EXT_NGHBR_LST_MSG_SEQ_s, GEN_NGHBR_LST_MSG_SEQ_s,
10 CHAN_LST_MSG_SEQ_s, EXT_CHAN_LST_MSG_SEQ_s,
11 EXT_SYS_PAR_MSG_SEQ_s, USER_ZONE_ID_MSG_SEQ_s,
12 PRI_NGHBR_LST_MSG_SEQ_s, GLOB_SERV_REDIR_MSG_SEQ_s, and
13 EXT_GLOB_SERV_REDIR_MSG_SEQ_s to NULL.
- 14 o The mobile station shall store the band class (CDMABAND_s =
15 BAND_CLASS_r) and the Frequency Assignment
16 (CDMACH_s = CDMA_FREQ_r).
- 17 o The mobile station shall set PAGE_CHAN_s to '1' and PAGECH_s to the
18 Primary Paging Channel. The mobile station shall then begin
19 monitoring the Primary Paging Channel of the selected base station.
- 20 o If RESPOND_r is equal to '1', the mobile station shall perform the
21 following:
 - 22 ◊ If the *Channel Assignment Message* does not require an
23 acknowledgment, the mobile station shall enter the *Update*
24 *Overhead Information Substate* with a page response
25 retransmission indication within T_{34m} seconds after receiving
26 the *Channel Assignment Message*.
 - 27 ◊ If the *Channel Assignment Message* requires an acknowledgment,
28 the mobile station shall enter the *Update Overhead Information*
29 *Substate* with a page response retransmission indication within
30 T_{34m} seconds after Layer 3 receives an indication from Layer 2
31 that the acknowledgement to the *Channel Assignment Message*
32 has been sent and acknowledged.

33 4. *Data Burst Message*

34 5. *Extended Channel Assignment Message*: The mobile station shall process the 35 message as follows:

- 36 • If ASSIGN_MODE_r equals '000', the mobile station shall perform the following
37 actions:
 - 38 – The mobile station shall set CH_IND_s to '01'.

- 1 – If $P_REV_IN_USE_S$ is equal to or greater than six, the mobile station shall
- 2 store the Forward Fundamental Channel Radio Configuration
- 3 ($FOR_FCH_RC_S = FOR_FCH_RC_r$) and the Reverse Fundamental Channel
- 4 Radio Configuration ($REV_FCH_RC_S = REV_FCH_RC_r$)
- 5 – If $FREQ_INCL_r$ equals '0', the mobile station shall perform the following
- 6 actions:
- 7 + The mobile station shall store the frame offset ($FRAME_OFFSET_S =$
- 8 $FRAME_OFFSET_r$), the message encryption mode indicator
- 9 ($ENCRYPT_MODE_S = ENCRYPT_MODE_r$), the granted mode
- 10 ($GRANTED_MODE_S = GRANTED_MODE_r$), the default configuration
- 11 ($DEFAULT_CONFIG_S = DEFAULT_CONFIG_r$), and the occurrences of
- 12 PILOT_PN and PWR_COMB for each included member of the Active Set.
- 13 + The mobile station shall set $SERV_NEG_S$ to enabled.
- 14 + If $PACA_S$ is equal to enabled, the mobile station shall set $PACA_S$ equal to
- 15 disabled and $PACA_CANCEL$ to '0', shall disable the $PACA$ state timer,
- 16 and should indicate to the user that the $PACA$ call is proceeding.
- 17 + The mobile station shall initialize $CODE_CHAN_LIST$ as described in
- 18 2.6.8.
- 19 + The mobile station shall set $FPC_FCH_INIT_SETPT_S$ to
- 20 $FPC_FCH_INIT_SETPT_r$, $FPC_FCH_CURR_SETPT_S$ to
- 21 $FPC_FCH_INIT_SETPT_S$, $FPC_FCH_FER_S$ to $FPC_FCH_FER_r$,
- 22 $FPC_FCH_MIN_SETPT_S$ to $FPC_FCH_MIN_SETPT_r$,
- 23 $FPC_FCH_MAX_SETPT_S$ to $FPC_FCH_MAX_SETPT_r$, and
- 24 $FPC_PRI_CHAN_S$ to '0' if the mobile station supports any Radio
- 25 Configuration greater than 2.
- 26 + The mobile station shall set $FPC_SUBCHAN_GAIN_S$ to
- 27 $FPC_SUBCHAN_GAIN_r$.
- 28 + The mobile station shall set $REV_FCH_GATING_MODE_S$ to
- 29 $REV_FCH_GATING_MODE_r$.
- 30 + The mobile station shall set $REV_PWR_CNTL_DELAY_S$ to
- 31 $REV_PWR_CNTL_DELAY_r$ if $REV_PWR_CNTL_DELAY_INCL_r$ is equal to
- 32 '1'.
- 33 + The mobile station shall set $RLGAIN_ADJ_S$ to $RLGAIN_ADJ_r$.
- 34 + The mobile station shall then enter the *Traffic Channel Initialization*
- 35 *Substate* of the *Mobile Station Control on the Traffic Channel State*.
- 36 – If $FREQ_INCL_r$ equals '1', the mobile station shall perform the following
- 37 actions:

- 1 + If the band class is not supported by the mobile station, the mobile
2 station shall send a *Mobile Station Reject Order* with ORDQ field set to
3 '00000110' (capability not supported by the mobile station) and remain
4 in the *Mobile Station Origination Attempt Substate*.
- 5 + If the band class is supported by the mobile station, the mobile station
6 shall perform the following actions:
 - 7 o The mobile station shall store the frame offset ($\text{FRAME_OFFSET}_S =$
8 FRAME_OFFSET_T); the message encryption mode indicator
9 ($\text{ENCRYPT_MODE}_S = \text{ENCRYPT_MODE}_T$); the granted mode
10 ($\text{GRANTED_MODE}_S = \text{GRANTED_MODE}_T$); the default configuration
11 ($\text{DEFAULT_CONFIG}_S = \text{DEFAULT_CONFIG}_T$); the band class
12 ($\text{CDMABAND}_S = \text{BAND_CLASS}_T$); the Frequency Assignment
13 ($\text{CDMACH}_S = \text{CDMA_FREQ}_T$); and the occurrences of PILOT_PN and
14 PWR_COMB_IND for each included member of the Active Set.
 - 15 o The mobile station shall set SERV_NEG_S to enabled.
 - 16 o The mobile station shall initialize CODE_CHAN_LIST as described in
17 2.6.8.
 - 18 o The mobile station shall set $\text{FPC_FCH_INIT_SETPT}_S$ to
19 $\text{FPC_FCH_INIT_SETPT}_T$, $\text{FPC_FCH_CURR_SETPT}_S$ to
20 $\text{FPC_FCH_INIT_SETPT}_S$, FPC_FCH_FER_S to FPC_FCH_FER_T ,
21 $\text{FPC_FCH_MIN_SETPT}_S$ to $\text{FPC_FCH_MIN_SETPT}_T$,
22 $\text{FPC_FCH_MAX_SETPT}_S$ to $\text{FPC_FCH_MAX_SETPT}_T$, and
23 FPC_PRI_CHAN_S to '0' if the mobile station supports any Radio
24 Configuration greater than 2.
 - 25 o The mobile station shall set $\text{FPC_SUBCHAN_GAIN}_S$ to
26 $\text{FPC_SUBCHAN_GAIN}_T$.
 - 27 o The mobile station shall set RLGAIN_ADJ_S to RLGAIN_ADJ_T .
 - 28 o The mobile station shall set $\text{REV_FCH_GATING_MODE}_S$ to
29 $\text{REV_FCH_GATING_MODE}_T$.
 - 30 o The mobile station shall set $\text{REV_PWR_CNTL_DELAY}_S$ to
31 $\text{REV_PWR_CNTL_DELAY}_T$ if $\text{REV_PWR_CNTL_DELAY_INCL}_T$ is equal
32 to '1'.
 - 33 o The mobile station shall then tune to the new Frequency Assignment
34 and enter the *Traffic Channel Initialization Substate* of the *Mobile*
35 *Station Control on the Traffic Channel State*.
- 36 – If GRANTED_MODE_T equals '00', and the multiplex option and radio
37 configuration specified in the DEFAULT_CONFIG field is not supported by
38 the mobile station, the mobile station shall send a *Mobile Station Reject*
39 *Order* with ORDQ field set to '00000110' (capability not supported by the
40 mobile station) and remain in the *Mobile Station Origination Attempt*
41 *Substate*.

- 1 – If GRANTED_MODE_r equals '00' and DEFAULT_CONFIG_r is not equal to
2 '100', the mobile station shall send a *Mobile Station Reject Order* with the
3 ORDQ field set to '00001110' (RC does not match with DEFAULT_CONFIG_r)
4 and shall remain in the *Mobile Station Origination Attempt Substate* if any of
5 the following conditions is true:
 - 6 + FOR_FCH_RC_r is not equal to the Radio Configuration associated with
7 DEFAULT_CONFIG_r (see Table 3.7.2.3.2.21-2).
 - 8 + REV_FCH_RC_r is not equal to the Radio Configuration associated with
9 DEFAULT_CONFIG_r (see Table 3.7.2.3.2.21-2).
- 10 – If the mobile station does not support either of the Fundamental Channel
11 Radio Configurations (FOR_FCH_RC or REV_FCH_RC), the mobile shall
12 send a *Mobile Station Reject Order* with the ORDQ field set to '00000110'
13 (capability not supported by the mobile station) and remain in the *Mobile
14 Station Origination Attempt Substate*.
- 15 • If ASSIGN_MODE_r equals '001', the mobile station shall perform the following
16 actions:
 - 17 – If FREQ_INCL_r equals '0', the mobile station shall perform the following
18 actions:
 - 19 + If the message requires acknowledgement, the mobile station shall wait
20 until Layer 3 receives an indication from Layer 2 that the
21 acknowledgement to the message has been sent and acknowledged.
 - 22 + The mobile station shall set CONFIG_MSG_SEQ_s and ACC_MSG_SEQ_s
23 to NULL (see 2.6.2.2) and shall set PILOT_PN_s to the pilot PN sequence
24 offset of the strongest pilot in the list (PILOT_PN_r).
 - 25 + If the mobile station has not stored configuration parameters for the
26 Primary Paging Channel of the new base station, or if the stored
27 information is not current (see 2.6.2.2), the mobile station shall set
28 SYS_PAR_MSG_SEQ_s, NGHBR_LST_MSG_SEQ_s,
29 EXT_NGHBR_LST_MSG_SEQ_s, GEN_NGHBR_LST_MSG_SEQ_s,
30 CHAN_LST_MSG_SEQ_s, EXT_CHAN_LST_MSG_SEQ_s,
31 EXT_SYS_PAR_MSG_SEQ_s, USER_ZONE_ID_MSG_SEQ_s,
32 PRI_NGHBR_LST_MSG_SEQ_s, GLOB_SERV_REDIR_MSG_SEQ_s, and
33 EXT_GLOB_SERV_REDIR_MSG_SEQ_s to NULL.
 - 34 + The mobile station shall set PAGE_CHAN_s to '1' and PAGECH_s to the
35 Primary Paging Channel. The mobile station shall then begin
36 monitoring the Primary Paging Channel of the selected base station.
 - 37 + If RESPOND_r is equal to '1', the mobile station shall perform the
38 following:

- o If the *Extended Channel Assignment Message* does not require an acknowledgment, the mobile station shall enter the *Update Overhead Information Substate* with a page response retransmission indication within T_{34m} seconds after receiving the *Extended Channel Assignment Message*.
 - o If the *Extended Channel Assignment Message* requires an acknowledgment, the mobile station shall enter the *Update Overhead Information Substate* with a page response retransmission indication within T_{34m} seconds after Layer 3 receives an indication from Layer 2 that the acknowledgement to the *Extended Channel Assignment Message* has been sent and acknowledged.
- If $FREQ_INCL_r$ equals '1', the mobile station shall perform the following actions:
 - + If the band class is not supported by the mobile station, the mobile station shall send a *Mobile Station Reject Order* with $ORDQ$ field set to '00000110' (capability not supported by the mobile station) and remain in the *Mobile Station Origination Attempt Substate*.
 - + If the band class is supported by the mobile station, the mobile station shall perform the following actions:
 - o If the message requires acknowledgement, the mobile station shall wait until Layer 3 receives an indication from Layer 2 that the acknowledgement to the message has been sent and acknowledged.
 - o The mobile station shall set $CONFIG_MSG_SEQ_s$ and $ACC_MSG_SEQ_s$ to NULL (see 2.6.2.2) and shall set $PILOT_PN_s$ to the pilot PN sequence offset of the strongest pilot in the list ($PILOT_PN_r$).
 - o If the mobile station has not stored configuration parameters for the Primary Paging Channel of the new base station, or if the stored information is not current (see 2.6.2.2), the mobile station shall set $SYS_PAR_MSG_SEQ_s$, $NGHBR_LST_MSG_SEQ_s$, $EXT_NGHBR_LST_MSG_SEQ_s$, $GEN_NGHBR_LST_MSG_SEQ_s$, $CHAN_LST_MSG_SEQ_s$, $EXT_CHAN_LST_MSG_SEQ_s$, $EXT_SYS_PAR_MSG_SEQ_s$, $USER_ZONE_ID_MSG_SEQ_s$, $PRI_NGHBR_LST_MSG_SEQ_s$, $GLOB_SERV_REDIR_MSG_SEQ_s$, and $EXT_GLOB_SERV_REDIR_MSG_SEQ_s$ to NULL. The mobile station shall store the band class ($CDMABAND_s = BAND_CLASS_r$) and the Frequency Assignment ($CDMACH_s = CDMA_FREQ_r$).
 - o The mobile station shall set $PAGE_CHAN_s$ to '1' and $PAGECH_s$ to the Primary Paging Channel. The mobile station shall then begin monitoring the Primary Paging Channel of the selected base station.
 - o If $RESPOND_r$ is equal to '1', the mobile station shall perform the following:

- 1 ◊ If the *Extended Channel Assignment Message* does not require an
- 2 acknowledgment, the mobile station shall enter the *Update*
- 3 *Overhead Information Substate* with a page response
- 4 retransmission indication within T_{34m} seconds after receiving
- 5 the *Extended Channel Assignment Message*.
- 6 ◊ If the *Extended Channel Assignment Message* requires an
- 7 acknowledgment, the mobile station shall enter the *Update*
- 8 *Overhead Information Substate* with a page response
- 9 retransmission indication within T_{34m} seconds after Layer 3
- 10 receives an indication from Layer 2 that the acknowledgement to
- 11 the *Extended Channel Assignment Message* has been sent and
- 12 acknowledged.
- 13 • If ASSIGN_MODE_r equals '010', the mobile station shall perform the following
- 14 actions:
- 15 – If the mobile station does not support analog operation in the requested
- 16 band class, the mobile station shall send a *Mobile Station Reject Order* with
- 17 ORDQ field set to '00000110' (capability not supported by the mobile
- 18 station) and remain in the *Mobile Station Origination Attempt Substate*.
- 19 – If the mobile station supports analog operation in the requested band class,
- 20 the mobile station shall perform the following actions:
- 21 + If RESPOND_r equals '1' and USE_ANALOG_SYS_r equals '0', the mobile
- 22 station shall enter the analog Initialization Task with an origination
- 23 indication (see 2.6.1).
- 24 + If RESPOND_r equals '1' and USE_ANALOG_SYS_r equals '1', the mobile
- 25 station shall perform the following actions:
- 26 o The mobile station shall set SERVSYS_s to SYS_A if ANALOG_SYS_r is
- 27 equal to '0', or set SERVSYS_s to SYS_B if ANALOG_SYS_r is equal to
- 28 '1'.
- 29 o The mobile station shall then enter the analog Initialization Task
- 30 with an origination indication (see 2.6.1).
- 31 • If ASSIGN_MODE_r equals '011', the mobile station shall perform the following
- 32 actions:
- 33 – If the mobile station does not support analog operation in the requested
- 34 band class, the mobile station shall send a *Mobile Station Reject Order* with
- 35 the ORDQ field set to '00000110' (capability not supported by the mobile
- 36 station) and the mobile station shall remain in the *Mobile Station Origination*
- 37 *Attempt Substate*.
- 38 – If the mobile station supports analog operation in the requested band class,
- 39 the mobile station shall perform the following actions:
- 40 + If the analog channel type is '00', the mobile station shall perform the
- 41 following actions:

- o The mobile station shall store the system identification ($SID_S = SID_T$), voice mobile station attenuation code ($VMAC_S = VMAC_T$), voice channel number ($ANALOG_CHAN_S = ANALOG_CHAN_T$), SAT color code ($SCC_S = SCC_T$), and message encryption mode indicator ($MEM_S = MEM_T$).
 - o The mobile station shall set DTX_S to '00'.
 - o If $PACA_S$ is equal to enabled, the mobile station shall set $PACA_S$ to disabled and $PACA_CANCEL$ to '0', shall disable the $PACA$ state timer, and should indicate to the user that the $PACA$ call is proceeding.
 - o The mobile station shall enter the Confirm Initial Voice Channel Task (see 2.6.4.2) with an origination indication.
- + If the analog channel type is not '00', the mobile station shall perform the following actions:
 - o If the mobile supports narrow analog mode, the mobile station shall perform the following actions:
 - ◊ The mobile station shall store the system identification ($SID_S = SID_T$), voice mobile station attenuation code ($VMAC_S = VMAC_T$), voice channel number ($ANALOG_CHAN_S = ANALOG_CHAN_T$), message encryption mode indicator ($MEM_S = MEM_T$), analog channel type ($AN_CHAN_TYPE_S = AN_CHAN_TYPE_T$) and the digital SAT code ($DSCC_S = DSCC_MSB_T \times 4 + SCC_T$).
 - ◊ The mobile station shall set DTX_S to '00'.
 - ◊ If $PACA_S$ is equal to enabled, the mobile station shall set $PACA_S$ to disabled and $PACA_CANCEL$ to '0', shall disable the $PACA$ state timer, and should indicate to the user that the $PACA$ call is proceeding.
 - ◊ The mobile station shall enter the Confirm Initial Narrow Analog Voice Channel Task (see 2.6.5.2A of [22]) with an origination indication.
 - o If the mobile station does not support narrow analog mode, the mobile station shall send a *Mobile Station Reject Order* with the $ORDQ$ field set to '00000110' (capability not supported by the mobile station) and the mobile station shall remain in the *Mobile Station Origination Attempt Substate* of the *System Access State*.
- If $ASSIGN_MODE_T$ equals '100', the mobile station shall perform the following actions:
 - If $PACA_S$ is equal to enabled, the mobile station shall set $PACA_S$ to disabled and $PACA_CANCEL$ to '0', shall disable the $PACA$ state timer, and should indicate to the user that the $PACA$ call has been canceled.

- 1 – If GRANTED_MODE_r equals '00' and the multiplex option and radio
2 configuration specified in the DEFAULT_CONFIG_r field are not supported by
3 the mobile station, the mobile station shall send a *Mobile Station Reject*
4 *Order* with ORDQ field set to '00000110' (capability not supported by the
5 mobile station) and shall remain in the *Mobile Station Origination Attempt*
6 *Substate*.
- 7 – If GRANTED_MODE_r equals '00' and DEFAULT_CONFIG_r is not equal to
8 '100', the mobile station shall send a *Mobile Station Reject Order* with ORDQ
9 field set to '00001110' (RC does not match with DEFAULT_CONFIG) and
10 shall remain in the *Mobile Station Origination Attempt Substate* if one of the
11 following conditions is true:
 - 12 + FOR_RC_r is not equal to the Radio Configuration associated with
13 DEFAULT_CONFIG_r as specified in Table 3.7.2.3.2.21-2.
 - 14 + REV_RC_r is not equal to the Radio Configuration associated with
15 DEFAULT_CONFIG_r as specified in Table 3.7.2.3.2.21-2.
- 16 – If the mobile station does not support either of the Radio Configurations
17 (FOR_RC or REV_RC), the mobile station shall send a *Mobile Station Reject*
18 *Order* with the ORDQ field set to '00000110' (capability not supported by
19 the mobile station) and remain in the *Mobile Station Origination Attempt*
20 *Substate*.
- 21 – If CH_IND_r = '01' and the mobile station does not support the Fundamental
22 Channel, the mobile station shall send a *Mobile Station Reject Order* with
23 the ORDQ field set to '00000110' (capability not supported by the mobile
24 station) and remain in the *Mobile Station Origination Attempt Substate*.
- 25 – If CH_IND_r = '10' and the mobile station does not support the Dedicated
26 Control Channel, the mobile station shall send a *Mobile Station Reject Order*
27 with the ORDQ field set to '00000110' (capability not supported by the
28 mobile station) and remain in the *Mobile Station Origination Attempt*
29 *Substate*.
- 30 – If CH_IND_r = '11' and the mobile station does not support the Dedicated
31 Control Channel and Fundamental Channel concurrently, the mobile
32 station shall send a *Mobile Station Reject Order* with the ORDQ field set to
33 '00000110' (capability not supported by the mobile station) and remain in
34 the *Mobile Station Origination Attempt Substate*.
- 35 – If FREQ_INCL_r equals '1' and if the band class (BAND_CLASS_r) is not
36 supported by the mobile station, the mobile station shall send a *Mobile*
37 *Station Reject Order* with ORDQ field set to '00000110' (capability not
38 supported by the mobile station) and remain in the *Mobile Station*
39 *Origination Attempt Substate*.
- 40 – If the mobile station does not send a *Mobile Station Reject Order* as
41 specified above, it shall continue to perform the actions specified below.
- 42 – If FREQ_INCL_r equals '1', the mobile station shall set

- 1 + CDMABAND_S = BAND_CLASS_r
- 2 + CDMACH_S = CDMA_FREQ_r
- 3 - The mobile station shall store the bypass indicator
- 4 (BYPASS_ALERT_ANSWER_S = BYPASS_ALERT_ANSWER_r).
- 5 - The mobile station shall store granted mode (GRANTED_MODE_S =
- 6 GRANTED_MODE_r)
- 7 - The mobile station shall store the default configuration (DEFAULT_CONFIG_S
- 8 = DEFAULT_CONFIG_r).
- 9 - The mobile station shall store the Forward Traffic Channel Radio
- 10 Configuration (FOR_RC_S = FOR_RC_r) and the Reverse Traffic Channel Radio
- 11 Configuration (REV_RC_S = REV_RC_r).
- 12 - The mobile station shall store the frame offset (FRAME_OFFSET_S =
- 13 FRAME_OFFSET_r).
- 14 - The mobile station shall store the message encryption mode indicator
- 15 (ENCRYPT_MODE_S = ENCRYPT_MODE_r).
- 16 - The mobile station shall store the Forward power control subchannel
- 17 relative gain (FPC_SUBCHAN_GAIN_S = FPC_SUBCHAN_GAIN_r).
- 18 - The mobile station shall set RL_GAIN_ADJ_S to RL_GAIN_ADJ_r.
- 19 - The mobile station shall set REV_FCH_GATING_MODE_S to
- 20 REV_FCH_GATING_MODE_r.
- 21 - The mobile station shall set REV_PWR_CNTL_DELAY_S to
- 22 REV_PWR_CNTL_DELAY_r if REV_PWR_CNTL_DELAY_INCL_r is equal to '1'.
- 23 - If 3XFL_1XRL_INCL_r is equal to '1', the mobile station shall set
- 24 1XRL_FREQ_OFFSET_S to 1XRL_FREQ_OFFSET_r.
- 25 - The mobile station shall store the channel indicator (CH_IND_S = CH_IND_r)
- 26 and the mobile station shall perform the following actions:
- 27 + If CH_IND_r equals '01', the mobile station shall set
- 28 FPC_FCH_INIT_SETPT_S to FPC_FCH_INIT_SETPT_r,
- 29 FPC_FCH_CURR_SETPT_S to FPC_FCH_INIT_SETPT_S, FPC_FCH_FER_S to
- 30 FPC_FCH_FER_r, FPC_FCH_MIN_SETPT_S to FPC_FCH_MIN_SETPT_r,
- 31 FPC_FCH_MAX_SETPT_S to FPC_FCH_MAX_SETPT_r, and
- 32 FPC_PRI_CHAN_S to '0' if the mobile station supports any Radio
- 33 Configuration greater than 2. Then for each included member of the
- 34 Active Set, the mobile station shall store the following:
- 35 o Set the PILOT_PN field to PILOT_PN_r.
- 36 o Set the ADD_PILOT_REC_INCL field to ADD_PILOT_REC_INCL_r. If
- 37 ADD_PILOT_REC_INCL_r equals '1', the mobile station shall store the
- 38 following:

- 1 ◊ Set the PILOT_REC_TYPE field of PILOT_REC to
- 2 PILOT_REC_TYPE_r.
- 3 ◊ If PILOT_REC_TYPE_r equals '000', the mobile station shall set the
- 4 TD_POWER_LEVEL field of PILOT_REC to TD_POWER_LEVEL_r
- 5 and set the TD_MODE field of PILOT_REC to TD_MODE_r.
- 6 ◊ If PILOT_REC_TYPE_r is equal to '001', the mobile station shall
- 7 - Set the AUX_PILOT_QOF field of PILOT_REC to QOF_r.
- 8 - Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
- 9 AUX_PILOT_WALSH_r with the Walsh Code length specified by
- 10 WALSH_LENGTH_r.
- 11 ◊ If PILOT_REC_TYPE_r is equal to '010', the mobile station shall:
- 12 - Set the AUX_PILOT_TD_QOF field of PILOT_REC to QOF_r.
- 13 - Set the AUX_PILOT_TD_WALSH_CODE field of PILOT_REC to
- 14 AUX_TD_WALSH_r with the Walsh Code length specified by
- 15 WALSH_LENGTH_r.
- 16 - Set the AUX_TD_POWER_LEVEL field of PILOT_REC to
- 17 AUX_TD_POWER_LEVEL_r.
- 18 - Set the TD_MODE field of PILOT_REC to TD_MODE_r.
- 19 ◊ If PILOT_REC_TYPE_r is equal to '011', the mobile station shall:
- 20 - Set the SR3_PRIMARY_PILOT field of PILOT_REC to
- 21 SR3_PRIMARY_PILOT_r.
- 22 - Set the SR3_PILOT_POWER1 field of PILOT_REC to
- 23 SR3_PILOT_POWER1_r.
- 24 - Set the SR3_PILOT_POWER2 field of PILOT_REC to
- 25 SR3_PILOT_POWER2_r.
- 26 ◊ If PILOT_REC_TYPE_r is equal to '100', the mobile station shall:
- 27 - Set the SR3_PRIMARY_PILOT field of PILOT_REC to
- 28 SR3_PRIMARY_PILOT_r.
- 29 - Set the SR3_PILOT_POWER1 field of PILOT_REC to
- 30 SR3_PILOT_POWER1_r.
- 31 - Set the SR3_PILOT_POWER2 field of PILOT_REC to
- 32 SR3_PILOT_POWER2_r.
- 33 - Set the AUX_PILOT_QOF field of PILOT_REC to QOF_r.
- 34 - Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
- 35 AUX_PILOT_WALSH_r with the Walsh Code length specified by
- 36 WALSH_LENGTH_r.

- 1 – If ADD_INFO_INCL1_r is equal to '1', set the AUX_PILOT_QOF1
2 field of PILOT_REC to QOF1_r and set the
3 AUX_PILOT_WALSH_CODE1 field of PILOT_REC to
4 AUX_PILOT_WALSH1_r with the Walsh Code length specified
5 by WALSH_LENGTH1_r; otherwise, set the AUX_PILOT_QOF1
6 field of PILOT_REC to QOF_r and set the
7 AUX_PILOT_WALSH_CODE1 field of PILOT_REC to
8 AUX_PILOT_WALSH_r with the Walsh Code length specified by
9 WALSH_LENGTH_r.
- 10 – If ADD_INFO_INCL2_r is equal to '1', set the AUX_PILOT_QOF2
11 field of PILOT_REC to QOF2_r and set the
12 AUX_PILOT_WALSH_CODE2 field of PILOT_REC to
13 AUX_PILOT_WALSH2_r with the Walsh Code length specified
14 by WALSH_LENGTH2_r; otherwise, set the AUX_PILOT_QOF2
15 field of PILOT_REC to QOF_r and set the
16 AUX_PILOT_WALSH_CODE2 field of PILOT_REC to
17 AUX_PILOT_WALSH_r with the Walsh Code length specified by
18 WALSH_LENGTH_r.
- 19 o Set the PWR_COMB_IND field to PWR_COMB_IND_r.
- 20 o Set the CODE_CHAN_FCH field to CODE_CHAN_FCH_r.
- 21 o Set the QOF_MASK_ID_FCH field to QOF_MASK_ID_FCH_r.
- 22 + If CH_IND_r equals '01' and 3X_FCH_INFO_INCL_r equals to '1', for each
23 included member of the Active Set, the mobile station store the
24 following:
 - 25 o If 3X_FCH_LOW_INCL_r equals '1', set the QOF_MASK_ID_FCH_LOW
26 field to QOF_MASK_ID_FCH_LOW_r and the CODE_CHAN_FCH_LOW
27 field to CODE_CHAN_FCH_LOW_r. Otherwise, set the
28 QOF_MASK_ID_FCH_LOW field to QOF_MASK_ID_FCH_r and the
29 CODE_CHAN_FCH_LOW to CODE_CHAN_FCH_r.
 - 30 o If 3X_FCH_HIGH_INCL_r equals '1', set the
31 QOF_MASK_ID_FCH_HIGH field to QOF_MASK_ID_FCH_HIGH_r and
32 the CODE_CHAN_FCH_HIGH field to CODE_CHAN_FCH_HIGH_r.
33 Otherwise, set the QOF_MASK_ID_FCH_HIGH field to
34 QOF_MASK_ID_FCH_r and the CODE_CHAN_FCH_HIGH to
35 CODE_CHAN_FCH_r.

- 1 + If CH_IND_r equals '10', the mobile station shall set
- 2 FPC_DCCH_INIT_SETPT_s to FPC_DCCH_INIT_SETPT_r,
- 3 FPC_DCCH_CURR_SETPT_s to FPC_DCCH_INIT_SETPT_s,
- 4 FPC_DCCH_FER_s to FPC_DCCH_FER_r, FPC_DCCH_MIN_SETPT_s to
- 5 FPC_DCCH_MIN_SETPT_r, FPC_DCCH_MAX_SETPT_s to
- 6 FPC_DCCH_MAX_SETPT_r, and FPC_PRI_CHAN_s to '1' if the mobile
- 7 station supports any Radio Configuration greater than 2. Then for each
- 8 included member of the Active Set, the mobile station shall store the
- 9 following:
- 10 o Set the PILOT_PN to PILOT_PN_r.
- 11 o Set the ADD_PILOT_REC_INCL field to ADD_PILOT_REC_INCL. If
- 12 ADD_PILOT_REC_INCL is equal to '1', the mobile station shall store
- 13 the following:
- 14 ◊ Set the PILOT_REC_TYPE field of PILOT_REC to
- 15 PILOT_REC_TYPE_r.
- 16 ◊ If PILOT_REC_TYPE_r equals '000', the mobile station shall set the
- 17 TD_POWER_LEVEL field of PILOT_REC to TD_POWER_LEVEL_r
- 18 and set the TD_MODE field of PILOT_REC to TD_MODE_r.
- 19 ◊ If PILOT_REC_TYPE_r is equal to '001', the mobile station shall
- 20 - Set the AUX_PILOT_QOF field of PILOT_REC to QOF_r.
- 21 - Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
- 22 AUX_PILOT_WALSH_r with the Walsh Code length specified by
- 23 WALSH_LENGTH_r.
- 24 ◊ If PILOT_REC_TYPE_r is equal to '010', the mobile station shall:
- 25 - Set the AUX_PILOT_TD_QOF field of PILOT_REC to QOF_r.
- 26 - Set the AUX_PILOT_TD_WALSH_CODE field of PILOT_REC to
- 27 AUX_TD_WALSH_r with the Walsh Code length specified by
- 28 WALSH_LENGTH_r.
- 29 - Set the AUX_TD_POWER_LEVEL field of PILOT_REC to
- 30 AUX_TD_POWER_LEVEL_r.
- 31 - Set the TD_MODE field of PILOT_REC to TD_MODE_r.
- 32 ◊ If PILOT_REC_TYPE_r is equal to '011', the mobile station shall:
- 33 - Set the SR3_PRIMARY_PILOT field of PILOT_REC to
- 34 SR3_PRIMARY_PILOT_r.
- 35 - Set the SR3_PILOT_POWER1 field of PILOT_REC to
- 36 SR3_PILOT_POWER1_r.
- 37 - Set the SR3_PILOT_POWER2 field of PILOT_REC to
- 38 SR3_PILOT_POWER2_r.
- 39 ◊ If PILOT_REC_TYPE_r is equal to '100', the mobile station shall:

- 1 - Set the SR3_PRIMARY_PILOT field of PILOT_REC to
2 SR3_PRIMARY_PILOT_r.
- 3 - Set the SR3_PILOT_POWER1 field of PILOT_REC to
4 SR3_PILOT_POWER1_r.
- 5 - Set the SR3_PILOT_POWER2 field of PILOT_REC to
6 SR3_PILOT_POWER2_r.
- 7 - Set the AUX_PILOT_QOF field of PILOT_REC to QOF_r.
- 8 - Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
9 AUX_PILOT_WALSH_r with the Walsh Code length specified by
10 WALSH_LENGTH_r.
- 11 - If ADD_INFO_INCL1_r is equal to '1', set the AUX_PILOT_QOF1
12 field of PILOT_REC to QOF1_r and set the
13 AUX_PILOT_WALSH_CODE1 field of PILOT_REC to
14 AUX_PILOT_WALSH1_r with the Walsh Code length specified
15 by WALSH_LENGTH1_r; otherwise, set the AUX_PILOT_QOF1
16 field of PILOT_REC to QOF_r and set the
17 AUX_PILOT_WALSH_CODE1 field of PILOT_REC to
18 AUX_PILOT_WALSH_r with the Walsh Code length specified by
19 WALSH_LENGTH_r.
- 20 - If ADD_INFO_INCL2_r is equal to '1', set the AUX_PILOT_QOF2
21 field of PILOT_REC to QOF2_r and set the
22 AUX_PILOT_WALSH_CODE2 field of PILOT_REC to
23 AUX_PILOT_WALSH2_r with the Walsh Code length specified
24 by WALSH_LENGTH2_r; otherwise, set the AUX_PILOT_QOF2
25 field of PILOT_REC to QOF_r and set the
26 AUX_PILOT_WALSH_CODE2 field of PILOT_REC to
27 AUX_PILOT_WALSH_r with the Walsh Code length specified by
28 WALSH_LENGTH_r.
- 29 o Set the PWR_COMB_IND field to PWR_COMB_IND_r.
- 30 o Set the CODE_CHAN_FCH field to CODE_CHAN_FCH_r.
- 31 o Set the QOF_MASK_ID_FCH field to QOF_MASK_ID_FCH_r.
- 32 o Set the DCCH_INCL field to DCCH_INCL_r. If DCCH_INCL_r equals '1',
33 the mobile station shall store the following:
 - 34 ◊ Set the CODE_CHAN_DCCH field to CODE_CHAN_DCCH_r.
 - 35 ◊ Set the QOF_MASK_ID_DCCH field to QOF_MASK_ID_DCCH_r.
- 36 + If CH_IND_r equals '10' and 3X_DCCH_INFO_INCL_r equals to '1', for each
37 included member of the Active Set, the mobile station shall store the
38 following:

- o If $3X_DCCH_LOW_INCL_r$ equals '1', set the $QOF_MASK_ID_DCCH_LOW$ field to $QOF_MASK_ID_DCCH_LOW_r$ and the $CODE_CHAN_DCCH_LOW$ field to $CODE_CHAN_DCCH_LOW_r$. Otherwise, set the $QOF_MASK_ID_DCCH_LOW$ field to $QOF_MASK_ID_FCH_r$ and the $CODE_CHAN_DCCH_LOW$ to $CODE_CHAN_FCH_r$.
- o If $3X_DCCH_HIGH_INCL_r$ equals '1', set the $QOF_MASK_ID_DCCH_HIGH$ field to $QOF_MASK_ID_DCCH_HIGH_r$ and the $CODE_CHAN_DCCH_HIGH$ field to $CODE_CHAN_DCCH_HIGH_r$. Otherwise, set the $QOF_MASK_ID_DCCH_HIGH$ field to $QOF_MASK_ID_FCH_r$ and the $CODE_CHAN_DCCH_HIGH$ to $CODE_CHAN_FCH_r$.
- + If CH_IND_r equals '11', the mobile station shall set $FPC_FCCH_INIT_SETPT_s$ to $FPC_FCH_INIT_SETPT_r$, $FPC_FCH_CURR_SETPT_s$ to $FPC_FCH_INIT_SETPT_s$, $FPC_FCH_FER_s$ to $FPC_FCH_FER_r$, $FPC_FCH_MIN_SETPT_s$ to $FPC_FCH_MIN_SETPT_r$, $FPC_FCH_MAX_SETPT_s$ to $FPC_FCH_MAX_SETPT_r$, $FPC_DCCH_INIT_SETPT_s$ to $FPC_DCCH_INIT_SETPT_r$, $FPC_DCCH_CURR_SETPT_s$ to $FPC_DCCH_INIT_SETPT_s$, $FPC_DCCH_FER_s$ to $FPC_DCCH_FER_r$, $FPC_DCCH_MIN_SETPT_s$ to $FPC_DCCH_MIN_SETPT_r$, $FPC_DCCH_MAX_SETPT_s$ to $FPC_DCCH_MAX_SETPT_r$ and $FPC_PRI_CHAN_s$ to $FPC_PRI_CHAN_r$. Then for each included member of the Active Set, the mobile station shall store the following:

 - o Set the $PILOT_PN$ to $PILOT_PN_r$.
 - o Set the $ADD_PILOT_REC_INCL$ field to ADD_PILOT_REC . If $ADD_PILOT_REC_INCL$ is equal to '1', the mobile station shall store the following:
 - ◊ Set the $PILOT_REC_TYPE$ field of $PILOT_REC$ to $PILOT_REC_TYPE_r$.
 - ◊ If $PILOT_REC_TYPE_r$ equals '000', the mobile station shall set the TD_POWER_LEVEL field of $PILOT_REC$ to $TD_POWER_LEVEL_r$ and set the TD_MODE field of $PILOT_REC$ to TD_MODE_r .
 - ◊ If $PILOT_REC_TYPE_r$ is equal to '001', the mobile station shall
 - Set the AUX_PILOT_QOF field of $PILOT_REC$ to QOF_r .
 - Set the $AUX_PILOT_WALSH_CODE$ field of $PILOT_REC$ to $AUX_PILOT_WALSH_r$ with the Walsh Code length specified by $WALSH_LENGTH_r$.
 - ◊ If $PILOT_REC_TYPE_r$ is equal to '010', the mobile station shall:
 - Set the $AUX_PILOT_TD_QOF$ field of $PILOT_REC$ to QOF_r .

- 1 - Set the AUX_PILOT_TD_WALSH_CODE field of PILOT_REC to
- 2 AUX_TD_WALSH_r with the Walsh Code length specified by
- 3 WALSH_LENGTH_r.
- 4 - Set the AUX_TD_POWER_LEVEL field of PILOT_REC to
- 5 AUX_TD_POWER_LEVEL_r.
- 6 - Set the TD_MODE field of PILOT_REC to TD_MODE_r.
- 7 ◇ If PILOT_REC_TYPE_r is equal to '011', the mobile station shall:
- 8 - Set the SR3_PRIMARY_PILOT field of PILOT_REC to
- 9 SR3_PRIMARY_PILOT_r.
- 10 - Set the SR3_PILOT_POWER1 field of PILOT_REC to
- 11 SR3_PILOT_POWER1_r.
- 12 - Set the SR3_PILOT_POWER2 field of PILOT_REC to
- 13 SR3_PILOT_POWER2_r.
- 14 ◇ If PILOT_REC_TYPE_r is equal to '100', the mobile station shall:
- 15 - Set the SR3_PRIMARY_PILOT field of PILOT_REC to
- 16 SR3_PRIMARY_PILOT_r.
- 17 - Set the SR3_PILOT_POWER1 field of PILOT_REC to
- 18 SR3_PILOT_POWER1_r.
- 19 - Set the SR3_PILOT_POWER2 field of PILOT_REC to
- 20 SR3_PILOT_POWER2_r.
- 21 - Set the AUX_PILOT_QOF field of PILOT_REC to QOF_r.
- 22 - Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
- 23 AUX_PILOT_WALSH_r with the Walsh Code length specified by
- 24 WALSH_LENGTH_r.
- 25 - If ADD_INFO_INCL1_r is equal to '1', set the AUX_PILOT_QOF1
- 26 field of PILOT_REC to QOF1_r and set the
- 27 AUX_PILOT_WALSH_CODE1 field of PILOT_REC to
- 28 AUX_PILOT_WALSH1_r with the Walsh Code length specified
- 29 by WALSH_LENGTH1_r; otherwise, set the AUX_PILOT_QOF1
- 30 field of PILOT_REC to QOF_r and set the
- 31 AUX_PILOT_WALSH_CODE1 field of PILOT_REC to
- 32 AUX_PILOT_WALSH_r with the Walsh Code length specified by
- 33 WALSH_LENGTH_r.

- 1 - If ADD_INFO_INCL_{2r} is equal to '1', set the AUX_PILOT_QOF2
2 field of PILOT_REC to QOF_{2r} and set the
3 AUX_PILOT_WALSH_CODE2 field of PILOT_REC to
4 AUX_PILOT_WALSH_{2r} with the Walsh Code length specified
5 by WALSH_LENGTH_{2r}; otherwise, set the AUX_PILOT_QOF2
6 field of PILOT_REC to QOF_r and set the
7 AUX_PILOT_WALSH_CODE2 field of PILOT_REC to
8 AUX_PILOT_WALSH_r with the Walsh Code length specified by
9 WALSH_LENGTH_r
- 10 o Set the PWR_COMB_IND field to PWR_COMB_IND_r
- 11 o Set the CODE_CHAN_FCH field to CODE_CHAN_FCH_r.
- 12 o Set the QOF_MASK_ID_FCH field to QOF_MASK_ID_FCH_r.
- 13 o Set the CODE_CHAN_DCCH field to CODE_CHAN_DCCH_r.
- 14 o Set the QOF_MASK_ID_DCCH field to QOF_MASK_ID_DCCH_r.
- 15 + If CH_IND_r equals '11' and 3X_FCH_INFO_INCL_r equals to '1', for each
16 included member of the Active Set, the mobile station store the
17 following:
 - 18 o If 3X_FCH_LOW_INCL_r equals '1', set the QOF_MASK_ID_FCH_LOW
19 field to QOF_MASK_ID_FCH_LOW_r and the CODE_CHAN_FCH_LOW
20 field to CODE_CHAN_FCH_LOW_r. Otherwise, set the
21 QOF_MASK_ID_FCH_LOW field to QOF_MASK_ID_FCH_r and the
22 CODE_CHAN_FCH_LOW to CODE_CHAN_FCH_r.
 - 23 o If 3X_FCH_HIGH_INCL_r equals '1', set the
24 QOF_MASK_ID_FCH_HIGH field to QOF_MASK_ID_FCH_HIGH_r and
25 the CODE_CHAN_FCH_HIGH field to CODE_CHAN_FCH_HIGH_r.
26 Otherwise, set the QOF_MASK_ID_FCH_HIGH field to
27 QOF_MASK_ID_FCH_r and the CODE_CHAN_FCH_HIGH to
28 CODE_CHAN_FCH_r.
- 29 + If CH_IND_r equals '11' and 3X_DCCH_INFO_INCL_r equals to '1', for each
30 included member of the Active Set, the mobile station store the
31 following:
 - 32 o If 3X_DCCH_LOW_INCL_r equals '1', set the
33 QOF_MASK_ID_DCCH_LOW field to QOF_MASK_ID_DCCH_LOW_r
34 and the CODE_CHAN_DCCH_LOW field to
35 CODE_CHAN_DCCH_LOW_r. Otherwise, set the
36 QOF_MASK_ID_DCCH_LOW field to QOF_MASK_ID_FCH_r and the
37 CODE_CHAN_DCCH_LOW to CODE_CHAN_FCH_r.

- o If $3X_DCCH_HIGH_INCL_r$ equals '1', set the $QOF_MASK_ID_DCCH_HIGH$ field to $QOF_MASK_ID_DCCH_HIGH_r$ and the $CODE_CHAN_DCCH_HIGH$ field to $CODE_CHAN_DCCH_HIGH_r$. Otherwise, set the $QOF_MASK_ID_DCCH_HIGH$ field to $QOF_MASK_ID_FCH_r$ and the $CODE_CHAN_DCCH_HIGH$ to $CODE_CHAN_FCH_r$.
 - The mobile station shall initialize $CODE_CHAN_LIST$ as described in 2.6.8, and shall set $SERV_NEG_s$ to enabled.
 - If $FREQ_INCL_r$ equals '1', the mobile station shall then tune to the new frequency assignment.
 - The mobile station shall then enter the *Traffic Channel Initialization Substate* of the *Mobile Station Control on the Traffic Channel State*.
- 6. *Feature Notification Message*: If $RELEASE_r$ is equal to '1', the mobile station shall enter the *Mobile Station Idle State* or the *System Determination Substate* of the *Mobile Station Initialization State* with a release indication (see 2.6.1.1).
- 7. *Intercept Order*: The mobile station shall enter the *Mobile Station Idle State*.
- 8. *Local Control Order*
- 9. *Lock Until Power-Cycled Order*: The mobile station shall disable its transmitter and record the reason for the *Lock Until Power-Cycled Order* in the mobile station's semi-permanent memory ($LCKRSN_P_{s-p}$ equals the least significant four bits of $ORDQ_r$). The mobile station should notify the user of the locked condition. The mobile station shall enter the *System Determination Substate* of the *Mobile Station Initialization State* with a lock indication (see 2.6.1.1), and shall not enter the *System Access State* again until after the next mobile station power-up or until it has received an *Unlock Order*. This requirement shall take precedence over any other mobile station requirement specifying entry to the *System Access State*.
- 10. *Maintenance Required Order*: The mobile station shall record the reason for the *Maintenance Required Order* in the mobile station's semi-permanent memory ($MAINTRSN_{s-p}$ equals the least significant four bits of $ORDQ_r$). The mobile station shall remain in the unlocked condition. The mobile station should notify the user of the maintenance required condition.
- 11. *PACA Message*: If $P_REV_IN_USE_s$ is less than or equal to four and the mobile station does not support PACA capability, the mobile station shall send a *Mobile Station Reject Order* with the $ORDQ$ field set to '00000110' (message requires a capability that is not supported by the mobile station); otherwise, the mobile station shall process the message as follows:
 - If $PACA_s$ is equal to disabled, the mobile station shall perform the following actions:
 - If the purpose of the message is to respond to an *Origination Message* ($PURPOSE_r$ is equal to '0000'), the mobile station shall perform the following actions:

- 1 + The mobile station shall set PACA_S to enabled and shall set PACA_SID_S
- 2 to SID_S.
- 3 + The mobile station shall set the PACA state timer to the duration shown
- 4 in Table 3.7.2.3.2.20-2 corresponding to the value of PACA_TIMEOUT_S.
- 5 + The mobile station should indicate to the user that the call has been
- 6 queued as a PACA call, and should indicate the current queue position
- 7 (Q_POS_r) of the call.
- 8 + The mobile station shall enter the *Mobile Station Idle State*.
- 9 - If the purpose of the message is to cancel the PACA call (PURPOSE_r is equal
- 10 to '0011'), the mobile station shall perform the following actions:
- 11 + The mobile station shall set PACA_S to disabled and PACA_CANCEL to '0',
- 12 shall disable the PACA state timer, and should indicate to the user that
- 13 the PACA call has been canceled.
- 14 + The mobile station shall enter the *Mobile Station Idle State*.
- 15 - If the purpose of the message is anything else (PURPOSE_r is not equal to
- 16 '0000' or '0011'), the mobile station shall ignore the message. The mobile
- 17 station shall remain in the *Mobile Station Origination Attempt Substate*.
- 18 • If PACA_S is equal to enabled, the mobile station shall perform the following
- 19 actions:
- 20 - If the purpose of the message is to respond to an *Origination Message*
- 21 (PURPOSE_r is equal to '0000'), the mobile station shall perform the following
- 22 actions:
- 23 + The mobile station should indicate to the user that the PACA call is still
- 24 queued, and should indicate to the user the current queue position
- 25 (Q_POS_r) of the call.
- 26 + The mobile station shall set the PACA state timer to the duration shown
- 27 in Table 3.7.2.3.2.20-2 corresponding to the value of PACA_TIMEOUT_S.
- 28 + The mobile station shall enter the *Mobile Station Idle State*.
- 29 - If the purpose of the message is to provide the queue position of the PACA
- 30 call (PURPOSE_r is equal to '0001'), the mobile station shall perform the
- 31 following actions:
- 32 + The mobile station should indicate to the user that the PACA call is still
- 33 queued, and should indicate the current queue position (Q_POS_r) of the
- 34 call.
- 35 + The mobile station shall set the PACA state timer to the duration shown
- 36 in Table 3.7.2.3.2.20-2 corresponding to the value of PACA_TIMEOUT_S.
- 37 + The mobile station shall enter the *Mobile Station Idle State*.

- 1 – If the purpose of the message is to instruct the mobile station to re-originate
2 the PACA call (PURPOSE_r is equal to '0010'), the mobile station shall remain
3 in the *Mobile Station Origination Attempt Substate*.
- 4 – If the purpose of the message is to cancel the PACA call (PURPOSE_r is equal
5 to '0011'), the mobile station shall perform the following actions:
6 + The mobile station shall set PACA_s to disabled, shall disable the PACA
7 state timer, and should indicate to the user that the PACA call has been
8 canceled.
9 + The mobile station shall enter the *Mobile Station Idle State*.

10 12. *Registration Accepted Order:*

- 11 • If ORDQ_r = '00000101', the mobile station shall set ROAM_IND_s = ROAM_IND_r
12 and should display the roaming condition.
- 13 • If ORDQ_r = '00000111', the mobile station shall perform the following
14 – The mobile station shall set ROAM_IND_s = ROAM_IND_r and should display
15 the roaming condition.
16 – The mobile station shall set SIG_ENCRYPT_MODE_s =
17 SIG_ENCRYPT_MODE_r and start encrypting the signaling messages sent on
18 r-dsch and r-csch using the encryption algorithm specified by
19 SIG_ENCRYPT_MODE_r (see Table 3.7.4.5-1) with the key-size specified by
20 KEY_SIZE_r (see Table 3.7.4.5-2).
21 – If USE_NEW_KEY is set to '1' the mobile station shall use the session key
22 generated at the most recent registration for encryption of signaling and
23 user information. The mobile station shall store the session key in
24 KEY_s[KEY_SEQ_NEW_{s-p}]. The mobile station shall increment the variable
25 KEY_SEQ_NEW_{s-p} by one (modulo 16).
26 – If USE_NEW_KEY is set to '0' then the mobile station shall use
27 KEY[KEY_SEQ_r] as the session key.

28 13. *Registration Rejected Order:* This order indicates that normal service is not
29 available on this system. The mobile station shall disable the full-TMSI timer. If
30 the received order specifies to delete the TMSI (ORDQ = '00000100'), the mobile
31 station shall set all the bits of the TMSI_CODE_{s-p} to '1'. The mobile station shall
32 enter the *System Determination Substate* of the *Mobile Station Initialization State*
33 with a registration rejected indication (see 2.6.1.1).

34 14. *Release Order:* If NDSS_ORIG_s is equal to enabled, the mobile station shall set
35 NDSS_ORIG_s to disabled, and should indicate to the user that the call origination
36 has been canceled. The mobile station shall enter the *Mobile Station Idle State* or
37 the *System Determination Substate* of the *Mobile Station Initialization State* with a
38 release indication (see 2.6.1.1). If the mobile station enters the *Mobile Station Idle*
39 *State*, and if PACA_s is equal to enabled, the mobile station shall set PACA_s to
40 disabled and PACA_CANCEL to '0', shall disable the PACA state timer, and should
41 indicate to the user that the PACA call has been canceled.

- 1 15. *Reorder Order*: If NDSS_ORIG_S is equal to enabled, the mobile station shall set
 2 NDSS_ORIG_S to disabled, and should indicate to the user that the call origination
 3 has been canceled. If PACA_S is equal to enabled, the mobile station shall set PACA_S
 4 to disabled and PACA_CANCEL to '0', shall disable the PACA state timer, and
 5 should indicate to the user that the PACA call has been canceled. The mobile
 6 station shall enter the *Mobile Station Idle State*.
- 7 16. *Retry Order*: This order indicates that the origination is rejected and specifies the
 8 time before which the mobile station shall not send an *Origination Message*
 9 containing the same packet data Service Option. The mobile station shall process
 10 the order as follows:
- 11 • If RETRY_TYPE_R is equal to '000', the mobile station shall set
 12 RETRY_DELAY_S[RETRY_TYPE] to 0, where RETRY_TYPE is equal to '001', '010',
 13 or '011'.
 - 14 • If RETRY_TYPE_R is equal to '001', then the mobile station shall perform the
 15 following:
 - 16 – If RETRY_DELAY_R is equal to '00000000', then the mobile station shall set
 17 RETRY_DELAY_S[RETRY_TYPE_R] to 0.
 - 18 – If RETRY_DELAY_R is not equal to '00000000' the mobile station shall set
 19 RETRY_DELAY_S as follows:
 - 20 + If the most significant bit of the RETRY_DELAY_R is '0', set
 21 RETRY_DELAY_UNIT_S to 1000ms. If the most significant bit of the
 22 RETRY_DELAY_R is '1', set RETRY_DELAY_UNIT_S to 60000ms.
 - 23 + The mobile station shall set RETRY_DELAY_VALUE_S to the seven least
 24 significant bits of RETRY_DELAY_R.
 - 25 + The mobile station shall store the next system time 80 ms boundary +
 26 RETRY_DELAY_VALUE_S × RETRY_DELAY_UNIT_S ms as
 27 RETRY_DELAY_S[RETRY_TYPE_R].
 - 28 + If NDSS_ORIG_S is equal to enabled, the mobile station shall set
 29 NDSS_ORIG_S to disabled, and should indicate to the user that the call
 30 origination has been canceled. If PACA_S is equal to enabled, the mobile
 31 station shall set PACA_S to disabled and PACA_CANCEL to '0', shall
 32 disable the PACA state timer, and should indicate to the user that the
 33 PACA call has been canceled.
 - 34 + The mobile station shall enter the *Mobile Station Idle State*.
- 35 17. *Security Mode Command Message*: The mobile station shall process the message as
 36 follows:
- 37 • The mobile station shall set SIG_ENCRYPT_MODE_S to SIG_ENCRYPT_MODE_R.

- 1 • If USE_NEW_KEY is set to '1' the mobile station shall use the session key
2 generated at the most recent registration for encryption of signaling and user
3 information. The mobile station shall store the session key in
4 KEY_S[KEY_SEQ_NEW_{S-p}]. The mobile station shall then increment the variable
5 KEY_SEQ_NEW_{S-p} by one (modulo 16).
- 6 • If USE_NEW_KEY is set to '0' then the mobile station shall use KEY[KEY_SEQ_r]
7 as the session key.

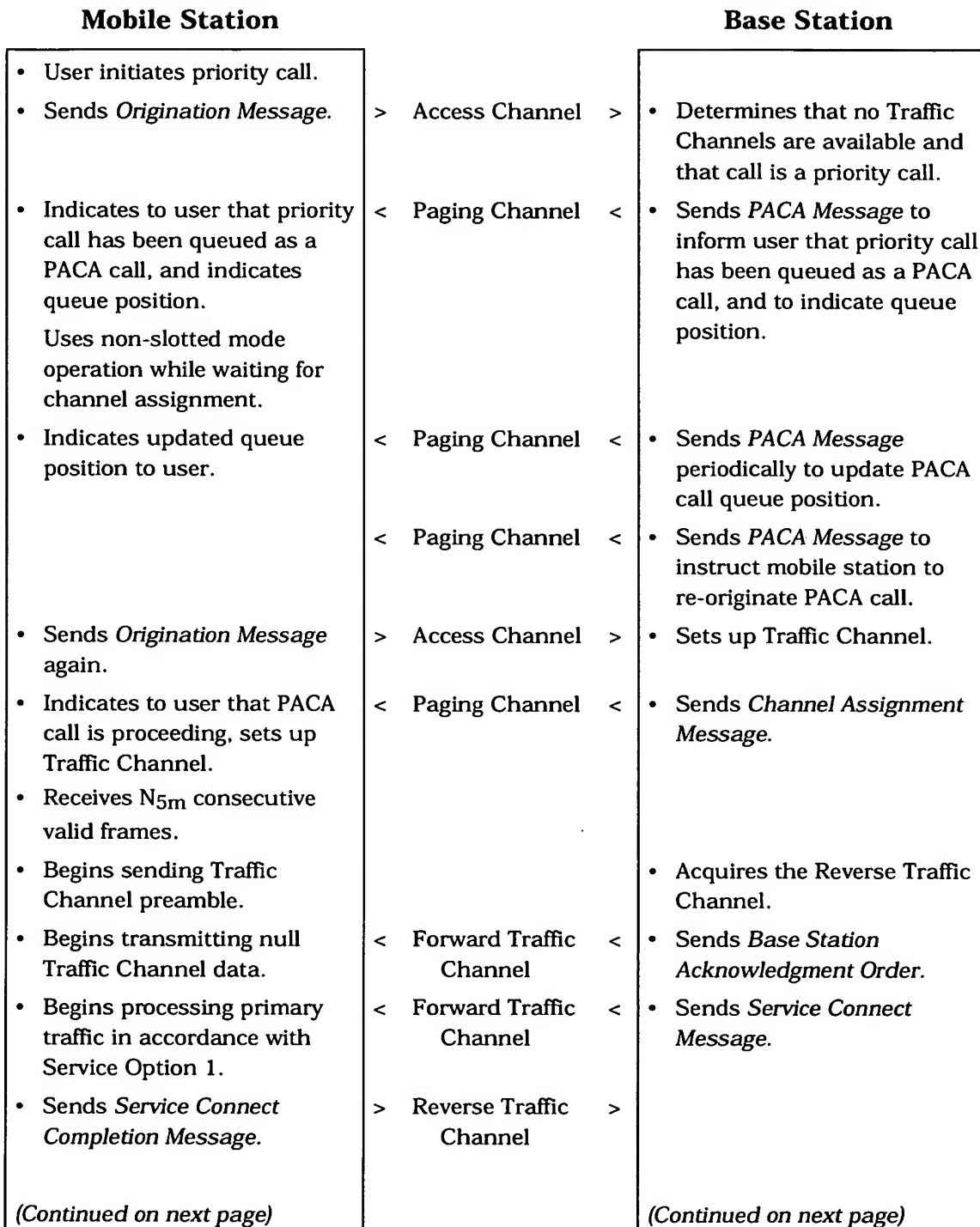
8 18. *Service Redirection Message*: The mobile station shall process the message as
9 follows:

- 10 • If the mobile station is directed to an unsupported operation mode or band
11 class, the mobile station shall respond with a *Mobile Station Reject Order* with
12 ORDQ equal to '00000110' (message requires a capability that is not supported
13 by the mobile station).
- 14 • If DELETE TMSI_r is equal to '1', the mobile station shall set all the bits of
15 TMSI_CODE_{S-p} to '1'.
- 16 • The mobile station shall disable the full-TMSI timer.
- 17 • The mobile station shall set RETURN_IF_FAIL_S = RETURN_IF_FAIL_r.
- 18 • If RECORD_TYPE_r is '00000000', the mobile station shall set RETURN_IF_FAIL_S
19 = RETURN_IF_FAIL_r, and enter the *System Determination Substate* of the *Mobile*
20 *Station Initialization State* with an NDSS off indication (see 2.6.1.1); otherwise:
21 – if REDIRECT_TYPE_r is '0', the mobile station shall store the redirection
22 record received in the message as REDIRECT_REC_S and shall enter the
23 System Determination Substate of the *Mobile Station Initialization State* with
24 a redirection indication (see 2.6.1.1).
- 25 – if REDIRECT_TYPE_r is '1', the mobile station shall store the redirection
26 record received in the message as REDIRECT_REC_S and shall enable
27 NDSS_ORIG_S, and shall record the dialed digits. The mobile station shall
28 enter the System Determination Substate of the *Mobile Station Initialization*
29 State with a redirection indication (see 2.6.1.1).

30 19. *SSD Update Message*: The mobile station shall respond to the message as specified
31 in 2.3.12.1.5.

32 20. *Status Request Message*: The mobile station shall disable the *System Access State*
33 timer and respond to the message. If P_REV_IN_USE_S is less than or equal to three,
34 the mobile station shall respond with a *Status Response Message*. If
35 P_REV_IN_USE_S is greater than three, the mobile station shall respond with an
36 *Extended Status Response Message*. If the message does not specify any
37 qualification information (QUAL_INFO_TYPE_r is equal to '00000000'), the mobile
38 station shall include the requested information records in the response. If the
39 message specifies a band class (QUAL_INFO_TYPE_r is equal to '00000001'), the
40 mobile station shall only include the requested information records for the specified
41 band class (BAND_CLASS_r) in the response. If the message specifies a band class

1



2

Figure B-9. PACA Call Processing (Part 1 of 2)

3

1

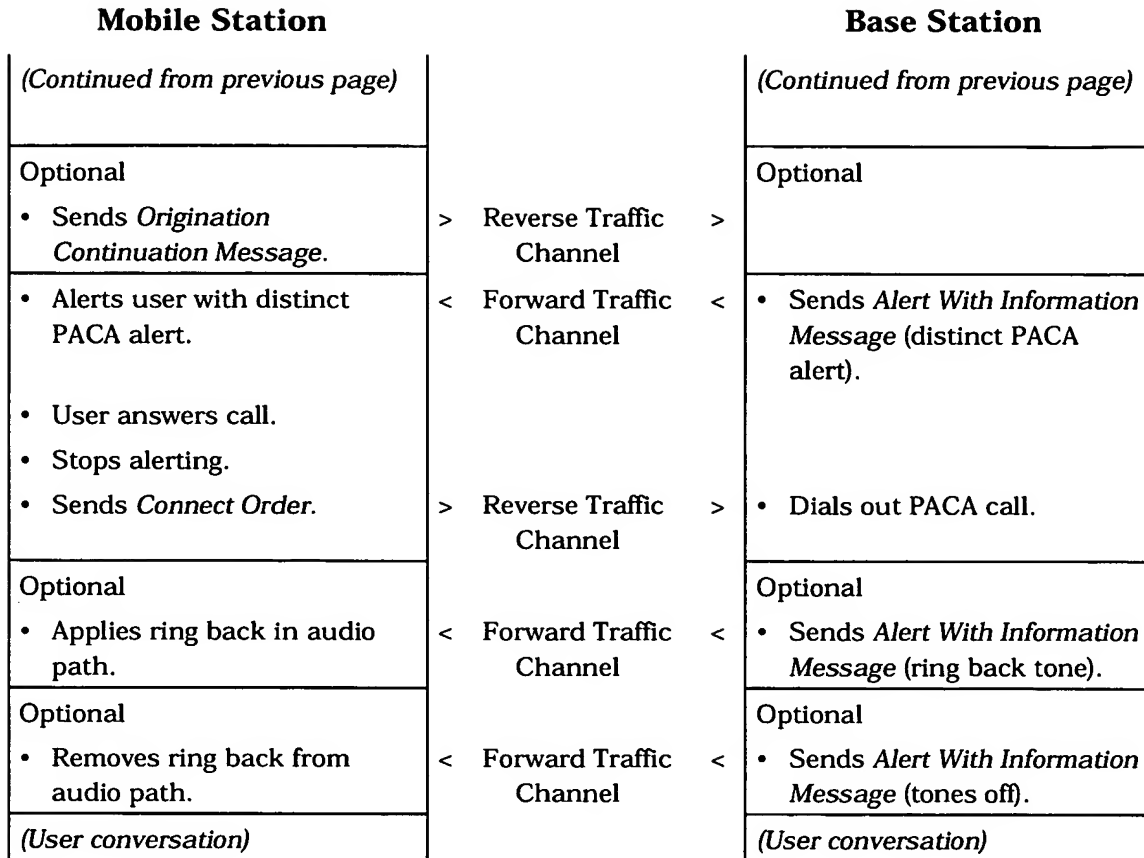


Figure B-9. PACA Call Processing (Part 2 of 2)

2

3

4 Figure B-10 illustrates call processing operations for failure recovery for hard handoff on
 5 the same frequency. Figure B-11 illustrates call flow for failure recovery for inter-frequency
 6 handoff when the mobile station does not search the Candidate Frequency. Figures B-12
 7 and B-13 show the call flow for mobile-assisted inter-frequency handoff (handoff preceded
 8 by searching of the Candidate Frequency Search Set by the mobile station), where the
 9 search is started by using the *Candidate Frequency Search Control Message*. Figures B-14
 10 and B-15 illustrate call flow for inter-frequency handoff when failure recovery also includes
 11 searching the Candidate Frequency Search Set. In the periodic search examples (Figures
 12 B-13 and B-15), it is assumed that the mobile station performs a search of the Candidate
 13 Frequency Search Set in a single visit to the Candidate Frequency. Figures B-16 and B-17
 14 illustrate the interaction of inter-frequency handoff operations with an ongoing periodic
 15 search of the Candidate Frequency Search Set.

16

17